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RAILROAD RECORD:

AND

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Journal of Commerce, Banking, Manufactures & Statistics,

EDITED BY

E. D. MANSFIELD, & T. WRIGHTSON,

VOL. VII.

CINCINNATI:
WRIGHTSON & Co., PRINTERS AND PUBLISHERS, 167 WALNUT STREET,
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The Railroad Record.

E. D. MANSFIELD, - - - - } Editors.
T. WRIGHTSON, - - - - }

CINCINNATI:

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IF Railroad Presidents, Superintendents and Secretaries, are requested to send us copies of all Annual and other Reports they may issue, together with their Monthly Statements, and such other matters of interest as they may be willing to furnish us

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IF On Tuesday fifty-five shares of the Indianapolis and Cincinnati Railroad Stock was sold at the New York Stock Exchange at 60 cents.

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VOL. 7.—No. 1.

THE RECORD—OURSELVES.

With this number commences the Seventh Volume of the RECORD. Six years, in its history, are past. They have been years of trial to us, to the country, and to Railroad Companies. In the midst of a real and solid prosperity in resources, and progress, there has, notwithstanding, been, in that time, two great commercial shocks, and a most extraordinary, unexpected, and, in some respects, unreasonable prostration of the Railroad Interest. For the fluctuations of commerce, we were prepared. But, we did not expect to see the minds of intelligent, well-informed men, to-day inflated with the most brilliant hopes, and to-morrow sunk into the deepest depression, while *the facts really remained just the same*. If the functions, performances, machinery, or business of railroads had materially changed between 1853 and 1857, we could see reasonable ground for a change in public opinion. But, without any material change in facts, the panic, in regard to railroads, which has existed in the year past, is a panic only, and must soon give way to more rational views.

In the six years past, we have steadily advocated the interests of railroads; and not merely of them, but of all proprietors of lands, mines, and factories, whose value must be, and has been, increased by every mile of railroad in the country. The only serious criticism made upon our course, is, that we have presented too sanguine views, and thus tended to mislead some persons into unwise investments. If we are to be judged by the results of 1857, '58, or by the results of injudicious enterprizes, indiscreetly conducted, we at once admit the criticism to be just. But, that standard is evidently unfair. In a great number of railroad enterprizes, as in all commercial enterprizes, there must be some mistakes, and failures. We are not accountable for such schemes. We are not accountable for engineering, or financiering.

If a road was estimated to require but six millions, and our argument on its business and profits was based upon that estimate, we are not accountable for an increase of two millions in engineering, two millions in discounts and interest, etc., till the road costs double the highest of original estimates. Nor do we believe, that engineers are particularly to blame. The rapid rise of prices, the heavy discounts demanded by brokers and bankers, the sacrifices made to complete roads, all come in the career of a great commercial inflation. If the *business* originally estimated, and the *utility* of the road were correctly stated, (and time has, in nearly every instance, proved they were,) then it can not be said, that we were too sanguine in our views and commendations.

We leave this matter, however, to the public judgment, trusting that labors, which have been freely, and almost gratuitously bestowed for the public benefit, and which we know

have benefitted the public immensely, may be kindly and justly considered.

We commence this number of the RECORD with a new dress and improved appearance. We hope to make its contents better; by improving the variety, selection, and character of the articles. Without diminishing our attention to railroads, we shall furnish more information on the subjects of STATISTICS, MINING, COMMERCE, and FINANCE. By systematizing these subjects (on which we have uncommon means of information,) we may embrace, in reasonable limits, all the facts which any man of business desires to know. The RECORD (as a fair comparison will show,) has furnished in the six years past, *more Statistical Information*, than any journal published weekly, in this country. In this department, we have access to all the books and papers published in this country, and most of those in Europe. We shall hereafter embody it more systematically, and so condense it, that our readers may have a full digest of Statistics. This department will be valuable to all well-informed men; for, there is not in this country *any* journal of Statistics. On the subject of Mining, too—especially in the new and most interesting districts of Arizona and Kansas—we shall have unusual means of information, and shall give our readers the fullest intelligence.

In these new efforts, we are encouraged only by hope. We *do* believe our labors and efforts are worthy of some reward; and that the great body of intelligent men, interested in these subjects, will do us, at least, common justice. We hesitate not to say, that those interested in railroads, and especially Railroad Companies, have not yielded us that support and encouragement, which they ought to have done, even for their own prosperity. Our work, our efforts, and our capital are expended largely for their benefit. The time is at hand, when they will need such aid, in their new career. Will they not aid us? At any rate, we shall appeal to an intelligent public, for that support, which we are conscious of justly deserving.

SIX YEARS OF RAILROADING IN THE NORTH-WEST.

In the six years of the RECORD, we have kept an account of the progress of Railroads, and, especially, in the North-western States. It may aid the readers in making a fairer estimate of the utility of Railroads, the progress of the country, and of our own humble labors, as one of the advocates of great public works, to make some comparison between *then* and *now*. It may also correct opinions, as to what we are doing. Six years are a mere trifle, in the life of a State or nation; but, we are accustomed to move at such a rapid rate, and to do so much, by what we call *enterprize*, that we really think the work of an age ought to be done in a single year! This is not only

unreasonable, but it becomes very unjust to ourselves, in a time like the present, when there is a comparative stagnation in some branches of business. We think, that when we have whirled on at the rapid rate of from 1853 to 1856, we ought to continue at the same rate in spite of all commercial obstructions; in spite of adverse seasons; in spite of all extravagance, and of all new demand in all other employments. We have not quite done this, and because we have not, a great many people are in a serious fit, and think themselves very much misused! But, let us see what we have done, in six North-Western States.

The RECORD was commenced in March, 1853, and from July, 1852, to July, 1858, was six years, in which period we have the means of making the contrast. In the column of 1852, is given the number of miles of completed railroad reported by Mr. Andrews to the Government. For 1858, we give our own list.

	1852.	1858.
In Ohio.....	1,154 miles.	2,870 miles.
In Indiana.....	755 " "	1,792 " "
In Illinois.....	296 " "	2,648 " "
In Michigan.....	427 " "	813 " "
In Wisconsin.....	50 " "	776 " "
In Iowa.....	" "	436 " "
In six States.....	2,678½ "	9,325 " "
Made in six years.....		6,646½ "
In each year.....		1,100 " "

The average cost has been \$35,000 per mile, and, consequently, about *thirty-eighth millions of dollars per annum* has been expended in the construction, or sufficient to employ, at the average of wages, *one hundred thousand able-bodied men*. This expenditure has had a double effect, in the improvement of the country.

1. In the expenditure of such an immense amount of money, and the employment of so many men.

2. And by furnishing facilities to carry off the produce of the country.

The last effect no one can sufficiently estimate. It has reduced, by one half, the cost of transportation, and given a positive value in market to every bushel of grain, on the remotest farm. The effect of this is seen in the increased value of improved farms, in the producing States. Take the State of Ohio, for example.

The valuation of property in Ohio stand thus at different periods:

In 1852.....	\$507,591,911
In 1858.....	850,000,000
Increase.....	333,000,000

That is an annual increase of \$58,000,000 per annum.

The expenditures on railroads has been \$10,000,000 per annum; so that the improved value of State property has been six times greater than the whole amount expended on railroads.

The *increased value* of property, in the North-western States, in the last six years, has been about *one thousand millions*; while the expenditures on railroads in that time has been *two hundred millions*.

Whatever effect on that increase of property has been produced by railroads, it is *certain* that the North-western States could *afford to give the entire cost of all their roads*; and yet, have left near eight hundred millions of increased value!!

Such a result, we undertake to say, has not been produced by any species of social machinery in the same time, since the world began.

What is there discouraging in their business? Nothing but the reduction of business in 1857, '58. Why should that discourage any one, when that reduction has been far less than in any other kind of business?

Undoubtedly there was less decrease in railroad business, than in other kinds of business; and, undoubtedly, too, that reduction was owing to causes which have not yet been appreciated by the public. In five years past, we have had but two good crops, and hardly that. It is only strange that the falling off has not been greater.

We have now come to a period when there will be a rapid increase of railroad business, and we hazard nothing in saying, that the year 1859 will probably produce greater results on railroads, than has ever been known.

FINANCES OF THE STATE OF NEW YORK—COMPTROLLER'S ANNUAL REPORT.

The financial condition of a great State, like New York, containing about 3,500,000 people, and having fifteen hundred millions of property, and containing within itself—the commercial center of the United States, can not but be interesting. It is moreover important to the general people; for, if the credit of the State of New York should be seriously injured, it would affect nearly all the States of the Union. Now, this report, as well as other general documents, prove conclusively, that the State of New York is *running into debt very rapidly, and increasing her taxation at a fearful rate*. To show this, we will give a brief review of its financial condition.

1. We have the annual receipts and expenditures, which are as follows, viz:

The following is an abstract of the condition of the Treasury at the close of the last fiscal year, Sept. 30, 1858:

Balance 30th September, 1857.....	\$452,610 54
Received into the Treasury on account of the several funds during the year ending 30th September, 1858.....	5,643,442 86
Amount of warrants drawn on the Treasury remaining unpaid on the 30th Sept., '58....	654 18
	\$6,096,747 58

Warrants drawn on the Treasury, on account of the several funds, during the year ending 30th Sept., 1858.....	\$5,530,286 69
Amount of warrants drawn on the Treasury, remaining unpaid on the 30th Sept., 1858..	461 47
	5,530,748 16
Balance in the Treasury 30th Sept., 1858.....	\$565,959 42

This looks very well on paper, as if there was an actual balance; but, as it does not tell whence the money came from, we can

gather nothing of the real state of things from this statement. But there are other accounts, which will exhibit it, clearly. We must premise, that formerly the State of New York had a *general fund*, derived from various sources, out of which was paid her general expenses. Subsequently the Canal Revenue came up to nearly three millions per annum, and yielded the State a large revenue, and great calculations were made from the revenue of the Canals in future. But, the construction of railroads on nearly parallel lines with the Canals, begin to carry off the business of the Canals, and diminish their revenues. This utterly disappointed the calculations of revenue, and the General Fund came rapidly into debt. After that the enlargement of the canal was begun, under the idea, that it would increase the revenues, and thus the whole debt of the State rapidly increased. This will appear from the following statement of the Comptroller.

GENERAL FUND DEBT.—The principal of the General Fund State debt is payable as follows:

1859.....	\$350,000
1860.....	450,000
1861.....	1,400,000
1862.....	900,000
1864.....	287,760
1865.....	178,000
1866.....	325,000
1868.....	442,961
1875.....	100,000
At pleasure.....	1,958,082
On demand.....	53,910

Total.....\$6,505,653

The total debt of the State for all purposes is \$33,735,668—of which the following is a recapitulation:

General Fund Debt.....	\$6,505,654
Canal Stock Debt.....	24,460,014
Canal Floating Debt, (estimated).....	2,000,000
Contingent Debt.....	770,000

Total.....\$33,735,668

And this does not include the deficiency in the General Fund of \$953,264 27.

New York is, therefore, in debt to the amount of *thirty-four millions*; not very large in proportion to the State, but likely to become much larger. The natural consequence of this is a rapidly increasing tax, which is thus set forth by the Comptroller:

Year tax levied.	Aggregate amount of State, County, and Town Taxes.
1843.....	\$3,965,180 14
1844.....	4,243,101 81
1845.....	4,170,527 95
1846.....	4,647,461 88
1847.....	4,843,575 60
1848.....	5,295,458 23
1849.....	5,548,961 28
1850.....	6,312,787 33
1851.....	6,759,438 27
1852.....	7,007,688 08
1853.....	9,326,763 97
1854.....	9,638,279 63
1855.....	11,678,015 69
1856.....	12,743,179 73
1857.....	15,166,309 62

The tax of New York was doubled in six years; trebled in ten, and quadrupled in fifteen years!

The total valuation of property is in round numbers—\$1,500,000,000—*fifteen hundred millions*. The rate per cent. of taxation is about one per cent.

The statesmen of New York have an idea, that what has been will be, and consequently,

that as the New York and Erie Canal has been the channel of Western produce, so it will be forever. It is on this idea that they are proceeding to the enlargement of the Erie Canal, and the navigation of it, by steam. This is, in itself, a good thing. We have no doubt whatever, that steam may be used very advantageously, and boats be propelled at five miles per hour, which, with steamboats on the Hudson, will enable flour to be put in New York, from Cincinnati, in six days; but, this is nearly double the time required by the railroads, and conceding that it is done cheaper, we do not believe that the profit of the Erie Canal will be very much increased by it.

It is said, that the taxes of the City of New York are *eight millions* per annum! If this be so, it includes of course many permanent *improvement* taxes; such as *assessments* for grade, and pavements, which, in New York, amount to *two millions* per annum.

To our view, the financial affairs of New York seem to be going backward. The State will soon have over forty millions of debt, and where is the Canal Revenue to pay for them?

THEN AND NOW.

We have before us a volume of the *Mechanic's Advocate*, published in Albany, N. Y., in 1848, we make some selections from its "Railroad Department," which, even at that day, seems to have attracted a good share of editorial attention. The editor, in speaking of the OHIO CENTRAL RAILROAD, says:

"The Report of Jonathan Knight, Engineer of the Ohio Central Railroad Company, says that the distance from Wheeling to Columbus is 150 miles; the total rise and fall in this 150 miles is about 2,400 feet. Mr. Knight estimates the cost at about \$10,000 per mile, or \$1,500,000 for the entire length."

The editor of the *Advocate* gives, as his authority, the report of Mr. Knight, published in the *Zanesville Republican*, of December, 1847.

The *actual* cost of the Ohio Central Railroad, including equipments, we make to be about \$6,496,000, or nearly \$5,000,000 more than the original estimate; the road being nine miles *shorter* than stated by the engineer.

"The capital invested in Railroads in the New England States is supposed to be not less than \$50,000,000."—*Mech. Advocate*, January, 1848.

The amount *now* invested is not less than \$160,000,000.

NEW ORLEANS.—By a census of the city of New Orleans, completed on the 10th of February, 1859, there are slaves, 13,774; free negroes 8,276; white people 116,257; or a total population of 138,277. There are voters, 17,232; and white males between eighteen and seventy years of age, 31,371.

THE DAILY PENNY PRESS—a new daily published by our old friend HALL of the "*Occasional*," has just made its appearance. The editor, Mr. HENRY REED, late of the *Commercial*, is a gentleman fully competent to fill the position of editor-in-chief of the new journal. We wish him and his paper the fullest success.

RAILROAD MISCELLANY.

We hear more favorable accounts of traffic from some of the Western Roads, but the improvements is not general. The Illinois Central, Ohio and Mississippi, and Indianapolis and Cincinnati, show a fair increase in the first week of February over the same period of last year, but other roads still exhibit the effects of short crops and the late revulsion.

The earnings of the Erie Railroad for the month of—

January, 1858, were.....	\$304,707 85
January, 1859.....	376,856 64
Increase.....	\$71,648 19

The earnings of the Central Railroad Co. of New Jersey, for the month of—

January, 1859, were.....	\$61,145 28
For the same month last year.....	53,764 84
Increase 10 per cent.....	\$7,380 44

The coal tonnage of the Reading Railroad the past week was 19,029 tons, making for the season 255,481 tons, against 201,222 tons to same time last year. The coal tonnage over the Huntingdon and Broad Top for the last week was 2,345 tons, and for the season 13,825 tons, against 4,866 tons to the same time last year. The tonnage by the Delaware, Lackawanna and Western Road was, for the week, 11,036 tons, and for the year 51,948 tons.

Mr. Chamberlain, whose judgment against the La Crosse Road for some \$600,000 was broken by the recent decision of Judge Miller, has appealed to the Supreme Court at Washington. It will probably be three years before a decision can be had. Meantime, the road, we presume, will remain in the hands of the trustee under the third mortgage.

The January earnings of the Michigan Central Road were:

	1858.	1859.
Passengers.....	\$55,611 30	\$50,890 06
Freight.....	62,756 94	46,059 58
Miscellaneous.....	6,012 66	5,266 86
Total.....	\$122,380 45	\$101,386 50
Decrease.....		\$20,994 45

The earnings in January of the Chicago, Burlington and Quincy Railroad Company proper, and the Galesburg branch were as follows:

	Chicago & Burlington. (210 miles.)	Galesburg & Quincy. (100 miles.)
From Freight.....	\$33,294 79	\$11,718 21
From Passengers...	26,107 18	9,028 71
	1,793 68	855 33
Total.....	\$61,195 65	\$21,602 26
Receipts per mile...	291 41	216 02

The comparative statement of earnings and expenses of the Buffalo and State Line Railroad for the month of January, 1858 and 1859, is as follows:

	EARNINGS.		
	Passengers.	Freight.	Other Sources.
1858.....	\$24,512 34	\$51,848 22	\$1,150
1859.....	22,469 33	45,292 18	1,223
Increase.....			73
Decrease.....	2,043 01	6,551 04	....

	EXPENSES.		
	Construc- tion.	Maintain' Road.	Repairs Machinery. Operating.
1858.....	\$2,053 56	\$10,623 40	\$6,251 92
1859.....		11,871 32	4,683 48
Increase.....		1,247 92	
Decrease.....	2,053 56		1,568 44

Some of the Roads are showing an improve-

ment of traffic in February as compared with February, 1858, but the prospects for the Spring business are not very promising.

The first week on the Galena is as follows:

	1858.	1859.	Increase.
Freight.....	\$2,797 37	\$10,828 31	\$2,030 94
Passengers.....	5,584 45	6,063 20	78 75
Mails, etc.....	750 00	750 00	....
Total.....	\$16,131 32	\$18,341 51	\$2,109 69

The business of the Bellefontaine and Indiana Road in 1858, was as follows:

Earnings from Passengers.....	\$114,564 00
Earnings from Freight.....	192,525 53
Earnings from Mail and Express.....	25,137 17
Total.....	\$332,226 75
Working expenses.....	\$177,266 28
Interest.....	90,328 00
Taxes.....	8,225 64
	\$275,819 92

Net earnings.....	\$56,406 83
Working expenses of 1857.....	\$327,515 59
Working expenses of 1858.....	177,266 28
Decrease in 1858.....	\$59,249 31
Deduct decrease in earnings.....	16,125 13

Net increase in 1858..... \$34,124 18

The Hannibal and St. Joseph Railroad is finished, and the route from St. Louis to St. Joseph, by way of the North Missouri Railroad, was to have been opened for travel last week. A line of packets is to be established, connecting with the railroad at St. Joseph's and plying to Council Bluff and Nebraska City.

We understand that a meeting of the Executive and Superintending Officers of the Columbus and Xenia, Indiana Central, Dayton and Western, and Little Miami Railroads, has been held at Dayton, to discuss the feasibility of making a continuous gauge from Dayton to Indianapolis.

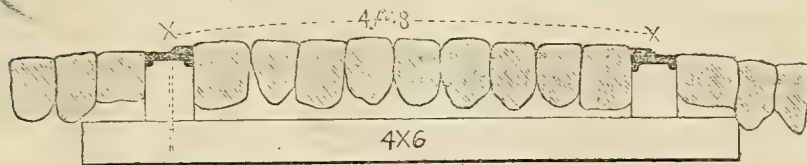
The Columbus, Piqua and Indiana Road is likely to be opened for traffic some time in March. There remains but twelve miles of track to be laid to complete the new line between Piqua and Union, where the junction is made with the Bellefontaine Railroad to Indianapolis.

The Wisconsin Assembly has passed the bill repealing the Stay law of last session.

Preliminary steps toward the repudiation of the bonds issued by Racine to the Racine and Mississippi Railroad Company have been taken by some of the citizens of that city. Repudiation appears to be on the increase.

The London *Times* of January 26, says: "The survey of the Atlantic and Great Western line, which is intended to complete a new and unbroken broad gauge route from New York to St. Louis, by the construction of a link of 378 miles between the New York and Erie and the Western roads, had been completed by Mr. Kennard, of London, and very favorably reported upon. There are two other routes to the West, both of which pay largely, although they have disadvantages of elevation and of interruption of gauge, from which the new line will be free. The opposition to its construction has therefore been severe, but the statements brought against it do not appear to have been borne out."

CITY PASSENGER RAILROADS.



The subject of authorising the construction of city passenger railroads in Baltimore is now under consideration in the City Councils of that city.

The *Baltimore American* says the perfection to which the use of railroads in the streets of Philadelphia has been brought, will enable the members of City Council to avail themselves of all the experience of that city, in properly guarding the interests and promoting the convenience of the public, and at the same time enable the companies to enter at once upon the work of constructing and working the roads in the most advantageous manner. By means of proper regulations for the running of the cars, the public suffer no inconvenience; and it would be well to specify, as far as possible, in the ordinance authorising their construction, all the minutiae of their government, as well as a proviso for such other regulations as the city authorities may hereafter deem promotive of the public interest.

In the city of New York the subject of a railroad on Broadway is attracting much attention, and the newspapers are discussing the modes of working the road even before authority is granted to lay it down. To show the propriety of reserving a right of control, present or prospective, we quote the following paragraph from a late communication in the *New York Tribune*:

"Would it not be well to lay one track along the easterly side of Broadway and return through some side street? Let the cars, during the first half of the day, when the travel is nearly all down town, go down Broadway and up the side street, and in the afternoon when the travel is mostly up town, reverse the order, go up Broadway and down the side street."

It will be observed from Mr. Kneass' letter, published below, that he is now engaged in an experiment with a cast iron track, so as to supersede entirely the use of wood in the superstructure. We shall be glad to publish the result of his experiment.

We may remark that the railroad tracks in Philadelphia are constructed of such a width that ordinary vehicles can run upon the rails, and the streets having tracks in them, are chosen by drivers of vehicles on this account. Since the inside of the tracks has become deeper from wear, some difficulty is experienced in getting off the track on the approach of the car. The plan proposed by Mr. Kneass, of reversing the wheels, and making the "gutter" outside of the track, will obviate difficulty in getting off, and present but little in getting on, as the vehicle can approach the rails at a more obtuse angle.

PHILADELPHIA, Feb. 3, 1859.

MY DEAR SIR:—I was in hopes that I would have been able before this to have given you a short sketch of our City Passenger Railroads, in reply to your question, whether one year's use and experience have in any way changed my views regarding them, or whether the community still holds the same antipathy to street railroads that they did prior to the introduction of the passenger cars? and I will now say, that to look back to the time when we first took up the pavement for the purpose of laying the track, when a riot was anticipated, or further, to the winter when the bill was first introduced at Harrisburg and lost, is a matter of great wonder. In the winter of 1857, the first charter was granted, and in the winter of 1858, January 20th, we saw a regular line of cars on Fifth and Sixth streets, I having had the honor of building the first tracks in our city, as Chief Engineer. During the construction, the feeling against us ran very high, and abuse upon abuse was heaped upon us; all sorts of application to court were made to restrain us, but fortunately without success, and we were permitted to show to our citizens what they now consider the greatest improvement that has been introduced among us since the building of our gas works. During the winter of 1858, nine charters were granted, and among the corporators in these charters, and now large stockholders and even directors, may be found the names of many gentlemen who were our most strenuous opponents in 1857. A week's run worked wonders. Contrary to their expectations or at least assertions, property did not depreciate, travel in ordinary vehicles was not incommoded, much less impeded, the privileges and rights of residents upon the line were not infringed, while the whole community were rushing to Fifth and Sixth streets to enjoy the comfort of a ride in the comparatively noiseless and very commodious, easy and rapidly moving cars. Their superiority over the omnibus was self-evident, and no croaking was heard, but very often a willing and graceful acknowledgement, that though their opposition was honest, yet they were mistaken, and were now eager to see the system generally introduced. In the spring of 1858, a regular contest commenced for the stock and controlling power in the new projects, which in some instances was carried so far, that the roads are only now being built, the delay having been occasioned by litigation.

We will now in a few days have all the lines but two completed, for which charters were granted last session, when there will be nearly ninety miles of Passenger Railroad tracks within our municipal limits, only three of which extend into the rural districts. We have three main North and South lines, and four main East and West lines; with one diagonal Northwest line, and one diagonal Southwest line, one of which is intended to reach Man-yunk, the other extends to Darby.

The roads all pay. The dividends so far have been ten per cent. The Fifth and Sixth street line sells for \$60 on \$50 par, whilst that of the Second and Third street line, the most valuable one, has sold at \$11 for \$15 paid in.

I consider that our plan of location is a valuable one; that is, in using two streets, a sin-

gle track in each, one for a down the other for an up track. By this means we have, with a single line, the combined travel of two omnibus lines, ensuring success for a single railroad, and this is preferable to a double track on one street, unless under peculiar circumstances such as our Market street. The management of a street railroad is of vital importance, and I know no business where the same amount of "leakage" could take place, so great is the variety of items to be looked after. The superintendent, therefore, should be a man of high character, morally, and be well paid. In fact, it is a new branch of business, and we must educate men for the position, as there is no other business that has such peculiar combinations.

As to the mode of constructing the track, I have made but little change since the first design. I would have altered the outline in some of the later roads I have built had I been able to do so; but our city ordinances prevented me. I would have made the section as per the accompanying tracing, and reversed the flanges of the wheels, placing them on the outside of the wheel instead of inside, thus avoiding a gutter in each street, which the track now forms; for thus the drainage would have been perfect, the water falling on it would at once flow to the side gutters without impediment. This arrangement is not new, but is inapplicable to our large roads with high speed, owing to the cone of the wheel; but for horse-power roads it is well suited. It was first introduced on your Baltimore and Ohio Railroad among the thousand and one experiments you tried, and for which the engineering profession and capitalists of later days should be extremely grateful, as a saving of millions has been made by the avoidance of plans rejected by your road. In the tracing you will see the plan without further elucidation. I may further say that any city without city passenger Railroads is decidedly behind the age, and the citizens are not aware of the amount of time they are losing, the degree of inconvenience they are suffering, or the amount of dividends that might accrue from an investment of the most solid and safe character. Wherever omnibuses run (which are absolutely nuisances,) a track should be laid, and the question of gradient, though one of moment, is not the bug-bear that many consider it. We carry our heaviest loads over 4½ feet grades, (straight line,) with two horses, and trot on a long 3½ feet grade. Some roads reach six feet per hundred, but have not been sufficiently tested with heavy loads for me to state accurately what is their value in road expenses. I had no idea that I should have inflicted so much, perhaps uninteresting, matter upon you when I commenced, but I trust you will pardon the infliction by my desire to show and tell you how we feel upon a subject that I know is now seriously considered in your city. Any further information that you may want upon this subject, or any other in my province, will be pleasurably imparted.

I will further state that I am about trying an entirely new track, composed of cast-iron, without any timber whatever, which, I apprehend, will, though more costly at first, be in the end the most economical track to construct. I will report the result, if you so desire.

Very respectfully, yours, etc.,

STRICKLAND KNEASS.

The *Tribune* says that the amount still needed to put in operation the Chicago & Fond du Lac Railroad is \$600,000. The whole road is 197 miles in length.

MARIETTA AND CINCINNATI R. R.

At the regular meeting of the Stockholders held on the 18th of August, 1858, it was—

"Resolved, That the election of Directors be postponed to the second Wednesday of February next, and that the annual meeting of stockholders for the election of Directors, and annual reports be fixed for the second Wednesday of February for each year hereafter."

Since the meeting of stockholders, at which the above resolution was passed, proceedings have been commenced, in the Common Pleas Court of Ross County, by the holders of third mortgage bonds of this Company, for the foreclosure of their mortgage on the road and rolling stock. Injunction was granted by the Court, restraining the Directors from the use of the property and assets of the Company, and placing the same in the hands of a Receiver.

This step resulted from the development of a scheme, entered into by the holders of 1st and 2d mortgage bonds with certain speculators for the foreclosure of their liens upon the property. The conflict which has thus commenced between the different classes of creditors, brings into peril the property and interests of stockholders, who are made defendants in the pending suit.

While the Directors are free to express their confidence in the fidelity of the officer appointed by the Court, the importance of having the property at all times under the immediate supervision of its owners, can not be too strongly urged.

With this brief statement of the facts, this whole matter is left to the stockholders to adopt such course as they may deem most proper to secure the best interests of the road.

The report of the Superintendent gives detailed statements of the operation of the road—showing the amount of its traffic and expenses. From this it will be seen that the expenses have been paid and very considerable improvements made in the machinery. Arrangements have also been consummated, by which means have been secured for the completion of the Muskingum bridge, and work upon that structure will be commenced as soon as the stage of water in the Muskingum river will permit.

The connection by rail with Marietta will thus be perfected, affording largely increased facilities for securing the traffic of that point.

The results in regard to traffic have been reached from sources purely local, and afford encouraging proof of the ability of the road, with proper eastern communications, to earn a surplus beyond its daily wants.

The effort to build a connecting line of road from Scott's Landing to Parkersburg promises to be successful.

The independent Company, engaged to construct that line, are making good progress with the grading, and require but comparatively a small amount of additional means to have the line opened early next spring.

The necessity to Baltimore of sustaining the southern and most direct connection with Cincinnati, is becoming daily more apparent.

It is a question of lively interest to this Company whether the Pennsylvania Railroad interest, which has already secured the control of most of the other Railroad lines west of the Ohio river, will not also follow out their original preference for this route, and complete the unfinished link between Marietta and Wheel-

ing. But whatever may be the policy of Philadelphia in this matter, it is very evident that the commercial interests of Baltimore are becoming aroused to the necessity of cherishing the only legitimate extension of their own great thoroughfare.

The policy of withholding the very business needed to keep up the road, from this route, and assigning the unfinished condition of the road as a reason, must give way, as soon as a proper rail connection is formed.

However valid this reason may have been, it will lose all force when the facilities of this route shall be made not only equal, but greatly superior to those of its northern rival.

If the traffic which fairly belongs to the route could be thrown upon it, the earnings over running expenses would soon complete the unfinished portion of the road, and render it permanently profitable to those who have invested their money in its securities.

A large portion of the means expended by the Baltimore and Ohio Company in extending their road westward, has been drawn from their traffic. In their case the stockholders alone were asked to forbear the demand of dividends; but in ours all parties must wait for income until the line of the road is perfected.

All efforts to raise additional capital having failed, with no probability of future success in the same direction, no hope is left except in the ability of the road to earn a surplus beyond necessary expenses. With the connection formed with the North-Western Road at Parkersburg, this result can be accomplished.

The vital question is, therefore, narrowed down to the early completion of this link. By securing promptly this end, the subordinate interests will present a strong claim upon the higher class of creditors for forbearance. The demonstration thus afforded of devotion to the enterprise, will secure consideration when controversy would fail.

The wounds of absent creditors will be healed by such attentions, and the chagrin and disappointment of the past soon forgotten with returning signs of prosperity.—Nothing can be more unwise than to yield to despondency in times of difficulty and embarrassment.

To judge of the value of your road by past opportunities of development, or to abandon the enterprise as hopeless, because of past failures, would be absurd and puerile.

The causes which have conspired to frustrate the enterprise, are too well understood to need recital.

Instead of justifying despondency, they should only incite to renewed and hearty effort. It is an easy task to bicker and find fault. Let those indulge in it who have a taste in that direction. Somebody must work—earnestly, patiently, and with self-denial. Let the coming year be one of co-operation and hopeful labor, and the fruit will surely appear.

By order of the Board,
WM. P. CUTLER, President.
February 9, 1859.

SUPERINTENDENT'S REPORT.

SUPERINTENDENT'S DEPART., M. & C. R. Co.,
CHILLICOTHE, February 1st, 1859.

For the information of the Board of Directors and of the Stockholders of the Company, I herewith submit a report of the operations of this department, for the year ending January 1st, 1859. I propose to follow the general plan adopted by my predecessor in his report of

February 1st, 1858. The comparative tables, however, seem to justify, and perhaps demand, fuller explanation than would be required if there had not been a material change in the system of accounts. Many of the items which are this year charged to account of transportation expenses, were formerly charged to construction account, and the comparative cost of working the road during the last and the preceding year can not, therefore, be accurately ascertained without a more elaborate analysis of the accounts of 1857 than can now be undertaken.

During the past five months of the year (February to June, inclusive,) that portion of the road east of Athens was not operated with any degree of certainty and regularity. Indeed for a considerable part of that time, passenger trains were not run over that portion of the road at all, and freight trains only at irregular intervals. The almost unprecedented floods of May greatly injured the road bed on nearly the entire eastern line of the road, and, when my duties as Superintendent commenced, business was entirely suspended east of Chillicothe. This suspension of business upon one half of the line greatly diminished the traffic upon the other half, and, consequently, during the six months, ending July 31st, the expenditures were in excess of the earnings more than fifteen thousand dollars."

EARNINGS AND EXPENSES.

Tables A. B. C., accompanying the report, contain detailed statements of the monthly and aggregate earnings and expenses of the fiscal year, and a comparison with the results of the previous year. We can not insert them, but the exhibit may be briefly stated as follows:

Passengers.....	\$125,007 82
Freight.....	188,045 37
Mail.....	22,097 57
Express.....	7,714 28
Telegraph.....	800 32

Total, as above.....\$343,665 36

The amount charged to the transportation account of the year is \$329,816 33. Construction account is charged with \$16,418 73. The report remarks upon these tables as follows:

"It will be observed that during the last few months the earnings have exceeded those of the corresponding months of the previous year, while there has been a general reduction of expenses. It may also be remarked that, while transportation is this year charged with large items that have heretofore gone into other accounts, it is also charged with many items of the previous year's business. Many claims for damages, and drawbacks, an unadjusted account of several thousand dollars with the Little Miami Co., for joint use of track in 1857, and other items which had not been adjusted, and, therefore, although properly chargeable to the expenses of that year, were not included in the year's statement, and now go to swell the account of 1858. The large excess (\$24,000,) in rent to the Little Miami Co., is explained by the fact that the joint use of track from Loveland to Cincinnati did not commence in 1857 until May, and of course there was but a part of a year's rent to pay. The other items of expense that exceed those of the previous year are repairs of freight cars, ballasting, track repairs, and station rents and repairs. The last item has been swelled by the payment on grounds for the Cincinnati Depot, of considerable amounts due the previous year. The causes of increase in the other items will be considered in remarks upon condition of roadway.

ACCIDENTS.

No accident, resulting in any injury to passengers, or loss of life to any employee of the Company, has occurred during the year. One man, who was lying upon the track, (supposed to be intoxicated,) was run over by a freight train, and killed; and an insane man threw himself under the wheels of a locomotive when in motion, and thus accomplished an evident purpose of committing suicide.

It is believed that in no previous year has the Company suffered by so few accidents, and so slight destruction of property, as in the one that has just passed.

CONDITION OF ROADWAY.

The damages to the road by the severe floods of the Spring, were so serious as severely to tax the ability of the Company, and by a large portion of the public an almost indefinite suspension of business, east of Chillicothe, was apprehended. The necessary repairs, were, however, promptly made, and the very considerable outlays therefor, swell, by many thousands of dollars, the cost of track repairs beyond what would otherwise have been necessary.

Notwithstanding the unusual damages by the floods, the condition of the roadway has been very materially improved during the year. East of Athens, most of the cuts have been ballasted, some with gravel and others with broken stone. The heaviest and worst cuts on the whole line of the road have been thoroughly cleaned out, and the slopes of many of them widened. The banks that were taken away by floods have been rebuilt, and others widened. Over 4,000 new cross ties have been placed in the track, some new slidings have been built, and others extended. An entirely new superstructure has been built across Raccoon, east of Moonville, and considerable repairs have been made on other wooden structures on the eastern division. On the western division, nearly all the bridges have required, and have received, extensive repairs. The masonry of the western pier of Walnut creek bridge, east of Chillicothe, which was undermined by the freshet of May, has been substantially rebuilt.

Contrasting the present condition of the roadway with what it was a year since, and considering the unusual repairs rendered necessary by the floods of Spring, and the unfavorable weather of nearly the whole season; it would not have been surprising if the expense of repairs had largely exceeded the amount of those items for the previous year. But had the construction account of this year been charged with such items as went to that account after the opening of the road last year, it would appear that there has been a very large reduction in the cost of repairs of track and superstructures. No reflection is intended upon the then management. It may be stated, in partial explanation of the large expenditures of that year without corresponding results, that there was then a large number of passenger and freight trains upon the road, running with some irregularity, and, to avoid delaying these trains, construction and ballasting trains, with their gangs of men, were often unemployed during many hours of the day, awaiting, on side tracks, the arrival of some one of the numerous passenger or freight trains;—while this year there has been but very little loss of time from this cause.

Confident that it is true, I am proud to say, in justice to the men who have had charge of, and been employed on road repairs, that no Company ever received fuller value for its ex-

penditures on the track and superstructures of its road than this Company has done for the last eight months.

But the fact can not be denied, and should not be forgotten, that much heavier expenditures are required in the future to enable the Company to do a now largely increasing business, promptly, safely, and cheaply. One or two of the bridges, at least, on the western division must be rebuilt during the present year, and several others will require considerable repairs. Masonry must ere long be substituted for the timber piers of several of the bridges on the eastern division, and, on both divisions, culverts should be built, and embankments take the place of some of the existing structures.

There are also some points where, in the opening of the road, temporary deviations were made from the original line, and where objectionable curves and high grades can be removed at comparatively small expense. The points where these changes are most imperatively demanded, because they are serious drawbacks upon a heavy mineral traffic, are between Zaleski and Hamden. The cost of these changes would almost be saved in a single year's business. Several improvements of a like character are also urgently needed on the eastern division, and more especially is thorough ballasting required there. Excellent material for this will soon be reached on the Union road.

The very great importance of completing the tunnels on the eastern division, was adverted to by my predecessor, in his last report,—as was also the absolute necessity of completing the line so as to secure a close rail connection with the North-western Virginia road.

It appears that the number of passengers carried was 117,690, being but 5,352 less than the previous year, and that the receipts from passengers were \$125,008 15—being \$21,394 44 less than the previous year. The number of miles run by passenger trains this year, was 201,373, against 248,004 miles last year—being a saving in the mileage of passenger trains, of 46,631 miles.

It appears that the aggregate tonnage was 83,415 tons, being an increase of 6,170 tons over the preceding year, while the mileage of freight trains was 22,439 miles less.

The *through* freight business, for reasons evident from previous statements, has been comparatively small, and the rate of tariff was much lower than the previous year. The local business, on the other hand, has largely increased. The additional tonnage, however, does not fully make up for the difference in distance hauled, and the extreme low rate on through freight, and, therefore, it is that the aggregate freight receipts are less than last year.

Miles run by trains of all classes during the year, 403,525, against 555,732 the previous year—the difference being 153,301 miles. The saving made by this difference in wear and tear to machinery, bridges, and tracks, is of very great importance.

The service of last year and the early part of the present, was very severe upon all classes of Rolling Stock. A very large number of cars, and several locomotives were disabled in 1857, and when the condition of the road was so far improved in 1858 as to justify the resumption of freight and passenger business over the whole line, it was found that there was not rolling stock enough to do it. Twelve of the most efficient locomotives on the road in 1857, and 134 of the best freight cars, were taken off the road late in 1857 and early in

1858, by virtue of special chattel mortgages. Many of the remaining freight cars required re-building and a very large proportion of them required new draw bars, new roofs, or other considerable repairs. The cost of these repairs, in labor and material, has necessarily been heavy, but less than might have been expected in view of the facts above referred to.

The expenses of the machinery department, as indeed of all others, have recently been very much diminished. The force in the shops has been somewhat reduced, and, since January 24th, the men are employed only two-thirds of each day. This course seemed far preferable to discharging a large number of men at a season of the year when they would find difficulty in finding employment elsewhere, and it is hoped that the business of the company will soon require, and its means justify, their employment at full rates.

CINCINNATI, HAMILTON & DAYTON RAILROAD.

At the meeting of the Board of Directors of the Cincinnati, Hamilton and Dayton Company held last week, the following contract was unanimously approved.

COPY OF PROPOSED CONTRACT.

Be it Resolved, That Stephen S. L'Homme-dieu, President of this Company, be hereby authorized and empowered to subscribe the name and affix the corporate seal of this Company to an agreement, as follows:

FEB. 8th, 1859.

This agreement, made between the Cincinnati, Hamilton and Dayton Railroad Company, party of the one part, and the Dayton and Michigan Railroad Company, party of the other part, Witnesseth: That the said the Cincinnati, Hamilton and Dayton Railroad Company, doth hereby covenant with the said Dayton and Michigan Railroad Company, that when the Dayton and Michigan Company shall have her railroad in full operation from the city of Dayton to the city of Toledo, quarterly thereafter to invest the one-half of the gross receipts from passengers and freights brought by the said the Dayton and Michigan R. R. Co., to pass from her said road upon the road of the Cincinnati, Hamilton and Dayton Co., in the purchase, in their direct numerical order, from the Dayton and Michigan R. R. Co., or the holders thereof, in the city of New York, three hundred of the seven per cent. mortgage bonds of the Dayton and Michigan Railroad Co., of one thousand dollars each, numbers nine hundred and one to twelve hundred inclusive, at eighty per cent. of the par value of said bonds; provided that public notice of the intention to purchase said bonds, specifying their numbers, shall be advertised by the Cincinnati, Hamilton and Dayton R. R. Co. for a reasonable time in one or more papers in Cincinnati and New York, and written notice to the said the Dayton and Michigan Railroad Company, fixing the time and place of purchase; and if within sixty days after the date of such notice, the said bonds are not presented for sale according to said notice, the obligation for the Cincinnati, Hamilton and Dayton Co. to purchase that part of said bonds shall cease; and this obligation on the part of the said the Cincinnati, Hamilton and Dayton Co., shall be printed on each of the said bonds specified in this contract, and authenticated by the certificate and signature of the President and Secretary thereof.

And in consideration of the premises, it is hereby agreed, that after three years from the time the Dayton and Michigan Co. shall have their road in operation from the city of Dayton

to the city of Toledo, the Dayton and Michigan Co. shall purchase from the Cincinnati, Hamilton and Dayton Co., or the holders thereof, all of the said three hundred bonds above described, at the same rate of eighty per cent., by appropriating therefor and applying thereto the one-half of the gross receipts from passengers and freights brought by the Cincinnati, Hamilton and Dayton Co. from their road to pass upon the road of the Dayton and Michigan Co., and to deposit the said proportion of gross receipts quarter-yearly, as the same accrues, in some responsible place in the city of New York, to be applied to the purchase of said bonds in their direct numerical order, and to give public notice thereof, for a reasonable time, in one or more of the newspapers published daily in the cities of Cincinnati and New York, and also written or printed notice to the Cincinnati, Hamilton and Dayton Co., of her offer and readiness to purchase the bonds.

And it is hereby further covenanted and agreed, by and between the said parties, that the entire issue of mortgage bonds of the Dayton and Michigan Co. on their said road, of every description, shall not exceed three millions of dollars; and the more effectually to insure the prompt payment of the interest upon the said three hundred bonds herein before described, that the Dayton and Michigan Co. will cause to be placed in pledge and in trust, with some suitable trustee, acceptable to the Cincinnati, Hamilton and Dayton Co., fifteen hundred of her said mortgage bonds of one thousand dollars each, being one-half of the said entire issue of three millions of dollars, and upon which no interest shall be paid as the same accrues, until the interest accrued on the aforesaid three hundred bonds, so agreed to be purchased by the Cincinnati, Hamilton and Dayton Co., shall be first paid; but the Dayton and Michigan Co. shall have the privilege to purchase, at any time, all the said three hundred bonds, at the rate of eighty per cent., and the interest accrued thereon, and if all or any of said bonds shall not be presented for sale and purchase, within sixty days after notice of said offer to purchase the same shall have been advertised and given, as herein provided, then all obligation upon the part of the Dayton and Michigan Co., and on the part of the Cincinnati, Hamilton and Dayton Co., to purchase the same shall cease, and the said fifteen hundred bonds so placed in pledge and trust as aforesaid, shall be returned.

And it is hereby further covenanted and agreed, by and between the said parties, that if within four years from the time the Dayton and Michigan Co. shall have her said road in operation as aforesaid, the business sent from her said road on to the said road of the Cincinnati, Hamilton and Dayton Co., shall not have been sufficient to furnish the means to purchase the whole of said three hundred bonds as aforesaid, then the Dayton and Michigan Co. shall furnish the means to purchase the residue thereof; the same to be purchased, after public notice as above provided, within sixty days; and further to insure the furnishing of said means, the said fifteen hundred bonds are to remain in pledge and in trust, and to draw no interest thereafter until the said means shall be wholly furnished.

And it is hereby further agreed, that the said fifteen hundred bonds, so to be placed in pledge and in trust for the purposes aforesaid, may be placed in pledge and in trust, for the like purposes, to the Michigan Southern and Northern Indiana Railroad Company, who has agreed, or is about to agree, to purchase one hundred and fifty of said bonds upon like

terms as herein before stipulated, for the mutual and proportionate benefit of both said companies.

The above contract is to be submitted to a vote of the stockholders of the C., H. and D. Company.

TERRE HAUTE, ALTON & ST. LOUIS RAILROAD.

We have received a circular giving a full statement of the condition, traffic and prospects of the Terre Haute, Alton and St. Louis Railroad Company. The statements, although not flattering, are certainly encouraging for the future; and show that when relieved from its pressing embarrassments, it can, under economical management and in years of fair business prosperity, pay the interest on its whole indebtedness. The earnings compare favorably with those of the other Western roads of equal length. The gross receipts of 1858 were \$780,445 19 against \$823,767 11 in 1857. The whole decrease took place in June, July and August, when the great freshet interfered seriously with the business of all the roads in that section of country. The report says:

The gross earnings of the road from Jan. 1, 1857, to May 1, 1858, at \$1,079,887 30, were upon an average \$67,492 95 per month; and the operating expenses, (exclusive of expenditures for construction,) during the same period, at \$780,030 34, equal to \$48,751 89 per month, upon the average—about 72.25 per cent. of the gross earnings. The present Superintendent of the road reports its earnings and expenses, for the six months ending with the 31st December, as follows: Gross earnings, \$420,065 81, being an average of \$70,010 97 per month; and the operating expenses, for the same time, exclusive of construction expenditures, \$252,601 49, equal to \$42,100 24 per month, or about 60 per cent. of the gross earnings. This diminution in the percentage of expenses to earnings, when considered in connection with the causes which have reduced the gross receipts of the past six months, is an encouraging feature, and no doubt is entertained, that, by a judicious expenditure, which has now become quite necessary, upon the road bed, very large reductions in the operating department may yet be made. The net profits of the road, it will be seen, have been as follows:

Gross earnings, from Jan. 1, 1857, to May 1, 1858.....	\$1,079,887 30
Less operating expenses for the same period..	780,030 34
Being, for sixteen months.....	\$299,856 96
Or an average of \$18,741 66 per month—equal to \$224,891 72 per annum.	
From July 1, 1858, to Dec. 31, 1858, gross earnings.....	420,065 81
Less operating expenses for the same period..	252,601 49
Being, for six months.....	\$167,464 32
Or an average of \$27,910 72 per month—equal to \$334,928 64 per annum.	

The earnings have been, to a considerable extent, expended in necessary constructions upon the road.

During the sixteen months extending from 1st January, 1857, to 1st May, 1858, there was expended in construction, and paid for from the earnings of the road, the sum of \$123,998 41; and from the 31st July to 31st December, 1858, there has been expended in construction, and paid for from the earnings of the road, the sum of \$102,961 30.

The total earnings, from 1st January, 1858, to 1st May, 1858, as shown by Mr. Allens report.....	\$1,079,887 30
Less operating expenses for same period	\$780,030 34
Construction expenditures, paid from earnings.....	123,998 41 904,028 65

Leaving.....\$175,868 55

As the actual cash receipts from the road, applicable to the payment of its interest and other liabilities during that period.

The statement of the present Superintendent shows the earnings from 1st July to 31st Dec., 1858, at.....	\$420,065 81
Less operating expenses as follows:	
Ordinary expenses.....	\$198,027 64
Extraordinary expenses caused by the flood.....	22,631 48
Supplies charged to storekeepers.....	31,942 37 252,601 49
Construction expenditures, paid from earnings.....	102,961 30—355,562 79

Leaving.....\$64,502 02

As the actual amount of cash which has been realized from the road during that period, and which could be made applicable to the payment of interest or other liabilities of the Company.

The present managers, in August and September, 1858, resumed, and have since maintained the regular payment of the interest upon the First Mortgage Bonds of the Terre Haute and Alton Road of \$1,000,000, and upon the First Mortgage Bonds of the Belleville and Illinoistown Railroad of \$600,000. Although the net earnings for the past six months have been \$167,464 32, as above stated, yet it has been seen that the Company could not appropriate of its cash means more than sufficient to pay the interest upon its First Mortgage Bonds, without neglecting necessary works of construction. And it is not anticipated that the Company will be able to do more, the present year, than to continue the payment of interest upon these First Mortgage issues, and to make those indispensable improvements in the track which the best interests of all parties require.

Considerable expenditures will be needed during the present year to put the road in complete order, and consequently the payment of the floating debt must be postponed, and the coupons funded upon classes of bonds excepting those named above. The Company offer fourth mortgage bonds for their coupons and floating debt, and the creditors, to some extent, are accepting them. The local business of the road is increasing, especially the coal traffic. The managers look for a much more favorable net result when the improvements in the track of the road and its business facilities have been made.

STATEMENT SHOWING AMOUNT OF EARNINGS FROM JULY 1, 1858, TO JAN. 1, 1859.

Passengers.....	\$202,277 34
Freight.....	199,106 40
Mail service.....	10,052 73
Express service.....	5,681 30
Miscellaneous.....	2,948 04

Total.....\$420,065 81

Deduct for expenses as per vouchers, audited.. 198,027 64

Net earnings.....\$222,038 17

The capital of the road is \$3,026,902, funded debt \$5,035,615, floating debt \$741,040, against which the Company have some \$274,000 bills and sums receivable, and other more

or less good assets. Even under the depressed business of the last six months the road appears to have earned over \$100,000 more than enough to pay the interest on the First Mortgage Bonds of the Belleville and Illinoistown road.

SOUTHERN PACIFIC RAILROAD!

Address to the Stockholders of the Southern Pacific Railroad Company.

Whereas, The Committee of Arbitration about 5 o'clock, P. M., on the 29th ult., submitted to the President of the Company, the following paper, to wit:

COMMITTEE ROOM, MARSHALL, TEXAS, }
January 29, 1859. }

To the President and Directors of the Southern Pacific Railroad Company:

The undersigned, Arbitrators, to whom was referred the duty of adjusting the accounts between the two contending parties, beg leave respectfully to report that they have had the same under consideration, and find the following amount to which they consider no valid or legal objections have been made to be now due and owing under the terms and provisions of the award of the 15th day of October, 1858, from the said Old Southern Pacific Railroad Company, to the said New Company, in cash or good negotiable paper to be approved by the undersigned, to wit: The sum of forty-nine thousand, six hundred and sixty-one dollars and thirty-six cents, which said sum of money, we, the undersigned, award to be paid over, subject to the terms and provisions of the said award, by the hour of 8 o'clock, P. M. inst., and that unless the said order be complied with, the undersigned beg leave to tender their resignation, and ask to be discharged from all further consideration of the matters submitted to them, in accordance with your request.

John T. Grant & Co.....	\$37,791 42
W. T. Scott.....	32,378 13
M. J. Hall.....	24,142 97
J. E. & J. S. Brown.....	22,031 32
B. M. Johnson.....	1,119 53
L. T. Witzfall.....	9,807 34
Dr. Jo Taylor.....	5,248 75
H. A. Whiting.....	1,365 62
L. Richardson.....	404 61
John P. Gliden.....	127 57
John W. Goodspeed.....	29 55
Gen. E. Greer.....	193 34
McLeroy & Bradford.....	765 06
Ed. Blood.....	322 77
Peter H. Scott.....	241 50
George Smith.....	116 29
W. F. Carter.....	190 77
W. M. Watkin.....	471 84
Martin Mulligan.....	149 44
R. C. Slaughter.....	1,826 58

\$148,984 30

All of which is respectfully submitted,

G. G. GREGG, [SEAL.]
J. MARSHALL, [SEAL.]
Signed, J. M. WOSKOM, [SEAL.]
H. P. PERRY, [SEAL.]
BENJ. LONG, [SEAL.]

Error in addition, above, \$10,000; should be \$138,984 40.

AND WHEREAS, Said Committee, at the same time, submitted, also, the following paper, to wit:

COMMITTEE ROOM, }
Marshall, January 29, 1859. }

To the President and Directors of the Southern Pacific Railroad Company.

The undersigned arbitrators, to whom was referred the matter of adjusting the accounts between the two companies, beg leave to report that they have had the same, with the exception thereto, under consideration, and have awarded that the annexed list of debts with the amounts, be and remain suspended for proof to sustain the exceptions thereto till 11 o'clock, A. M., on the 7th day of February, 1859:

J. T. Grant & Co.....	\$10,000 40
J. E. & J. S. Brown.....	22,031 32
W. P. Hill.....	4,112 00
F. Gardner.....	3,257 25
S. H. & A. M. Burnham.....	4,500 00
R. E. Rhodes.....	2,492 40
H. Wickland.....	12,812 91
S. H. Burnham.....	591 33
E. A. Bianchi, agent.....	476 68
W. R. D. Ward.....	7,900 00
E. A. Bianchi.....	1,513 22
J. P. Henderson.....	13,406 94
J. M. Saunders.....	564 73

All of which is respectfully submitted,

G. G. GREGG, [SEAL.]
J. MARSHALL, [SEAL.]
(Signed,) J. M. WOSKOM, [SEAL.]
H. P. PERRY, [SEAL.]
BENJ. LONG, [SEAL.]

And Where, is, The first paper above recited, purports to be an award, allowing the sum of \$138,984 40 in favor of the so-called new company; and directs that the one-third

thereof, the sum of \$49,661 33, should be paid by the hour of 8 o'clock, P. M., on that day; and therein further declares that unless said order be complied with, the committee beg leave to tender their resignation, and ask to be discharged from all further consideration of the subject.

And Whereas, The second paper above recited, purports to be an award between the same parties, suspending the final determination of claims, amounting to the sum of \$85,917 84, until the 7th inst., for proof then to be heard, sustaining the exceptions made thereto; and whereas, the President, in the exercise of a sound discretion, before the hour of 8 o'clock, P. M., of the 29th ult., accepted the resignation of said committee in the following letter, which was delivered to said committee before 8 o'clock, P. M., of the same day, to wit:

MARSHALL, TEXAS, Jan. 29, 1859.

Messrs. G. G. Gregg, J. Marshall, John M. Woskom, Perry and Long, Committee of Arbitration,

GENTLEMEN:—In your award delivered this evening, in the matters of arbitration, submitted to you by the Southern Pacific Railroad Company, and a pretended organization called the new Company, you state that you beg leave to tender your resignation, and ask to be discharged from all further consideration of the subjects submitted to you; I beg leave to state that your resignation is accepted, and you are discharged from any further consideration of the matters submitted to you, in accordance with your request.

(Signed,)

J. FOWLKES,
President S. P. R. R. Co.

And Whereas, The members of the late Committee of Arbitration, after the receipt of said letter, accepting their resignation, met together, as we are informed, and adopted what is called another, and last award, a copy of which this Company has not yet received from said persons, but have obtained what purports to be a printed copy of said proceedings, which is as follows, to wit:

COMMITTEE ROOM, Marshall, Texas, }
January 29th, 1859. }

WHEREAS, The undersigned have investigated the accounts between the Old and New Southern Pacific Railroad Companies, and reported to the President of the Old Company, party of the first part, in their AWARD of the 15th of October, 1858, that the sum of forty-nine thousand six hundred and sixty-one dollars and thirty-six cents, as the amount due and owing under the terms and provisions of their award of the 15th day of October, 1858, on this day, the 29th of January, 1859.

And whereas, the said party of the first part, being notified that said sum of money was due, and owing under said award, was required to make payment thereof by the hour of 8 o'clock, P. M., of this day; and whereas the said party of the first part being so notified, and required to make such payment, failed to make the same, but made default therein.

And whereas, the said party of the first part, did fail to pay and satisfy the said sum of money, under the said award, on the 15th inst., or at any time since that date forward to this date. Now therefore,

It is Awarded, by the undersigned, that the said party of the first part, as set forth in their award of the 15th day of October, 1858, hath made default, and thereby forfeited all the rights and privileges secured to said party of the first part, under the terms and provisions of said award. And,

It is further Awarded, that all the rights and privileges secured to the said party of the second part, under the said award, by reason of the default, of the said party of the first part, hath inured and accrued to the said party of the second part, as provided for under said award.

G. G. GREGG, [SEAL.]
J. MARSHALL, [SEAL.]
Signed, J. M. WOSKOM, [SEAL.]
H. P. PERRY, [SEAL.]
BENJ. LONG, [SEAL.]

Now, therefore, this Convention of Stockholders do not accept of said pretended awards, or recognize any binding force or validity in them, for the following reasons, to wit:

1. In the footing up of the first paper above recited, there is one error of \$10,000 in excess. It is stated to be \$148,984 40, when it should have been, by correct additions, \$138,984 40. There is consequently an error in the statement of \$49,661 33, of \$3,333 23 in excess, leaving the one-third of the total amount at the sum of \$46,333 13.

2. Neither one of the said papers contains a final award of all matters submitted to the committee; and both taken together, show that the award, if any, is partial, uncertain, incorrect, and not final.

3. The so-called Old Company, in pursuance of a notice, from the committee, given on the previous evening, requiring written exceptions, to be filed by 10 o'clock the 29th ult., by the President, to each claim, in a list, then furnished him, appeared before the committee at that hour, on that day, and filed objections in writing, to nearly all the claims contained in said list, and set up against said Company, and then and there offered to introduce testimony, to sustain their objections. The committee did not consider their objections or hear their testimony; but with the knowledge of both, and without permitting the introduction of their proof, the committee on that evening published these two papers, as their additional awards, above referred to; and after their resignation, published what purports to be an award declaring a forfeiture, &c.

4. The last paper mentioned is no award, because the gentlemen, whose names appear to it, were then and there, and at that time, no Committee of Arbitrators, but private persons, having no power whatever, to adjudicate any subject-matter whatever, that had been previously submitted to them. They had then tendered their resignation, which had been accepted, and they had been notified of the acceptance of the same, and of their discharge, &c. But if they had then, any power to make any further award, the action then taken, was illegal, null, and void, because it embraced matters not submitted to them. They never had, under the Arbitration bond, and the terms of the submission, any power to declare a forfeiture of any right on the part of

either party. Their powers were to settle matters of difference arising between the two parties, in the settlement of their difficulties about money demands; but not to settle questions of right and title to property, franchises and stocks. In this view, the award of the 15th day of October last, as well as the last one, is hereby declared to be null and void, so far as it exceeded the powers of the Arbitrators, as it was so declared by the Board of Directors shortly after the same was published, and has been so considered by our Stockholders and Board ever since. The President of the Company, nor the Board of Directors, or any person but the Stockholders themselves, had the power to submit to arbitration, questions of franchise, stock and chartered rights of the Company; nor had such questions at any time, been submitted to said committee.

5. The Committee awarded as stated above, that \$49,661 40, must be paid by 8 o'clock, P. M., on the 29th ult., but did not award that an amount of stock, in the so-called New Company, equal to that amount should be transferred on their books to the Old Company, or that the road should be placed in the hands of disinterested parties, to be handed to the Old Company, upon the payment of the balance of their pretended award. On account of the diligent efforts made everywhere to defeat the President in raising the amount of money necessary to meet the first award, he was restricted by the Stockholders in the use of the money loaned to the condition that it must not be used at all, unless by the using it, the possession of the road could be acquired, or it was placed in the hands of disinterested third parties, that when the other instalment should be paid, the Company should get the road, most certainly. The committee and the claimants against the Old Company, were repeatedly notified of this imperative condition.

We submit herewith, the very an usage of the law applicable to the objections made above:

"An award may be good in part, and void for the residue; but if the part which is void, is so connected with the rest as to affect the justice of a case between the parties, the whole is void."

"An award must decide the whole matter submitted to the arbitrators, it must not extend to any matter not comprehended in the submission; and it must be certain, final, and conclusive upon the whole matter referred."

"That the injured party may avail himself of defence" (excess of power in arbitrators) "in a court of law, where the excess of power is apparent on the face of the award, is not controverted."

All of the various pretended awards, for the reasons above stated, and others not mentioned, are believed to be nullities, and of no binding force upon the so-called Old Company. Waiving for the time these objections, and sincerely desiring to settle our difficulties by paying our just debts so far as we had the ability, our President, on the evening of the 29th ult., after the delivery of the two awards first above referred to, and before the hour of 8 o'clock, P. M., proposed, through a mutual friend, to pay the so-called New Company \$50,000 in cash; \$50,000 in sixty days; and the balance of the amount due when determined, on the 15th day of May next, also to pay the judgments against us, in Harrison county, Texas, supposed to amount to \$15,000, and to pay all the debts of the Company, &c., the road to be delivered to us, and the time payments to be secured by a lien or mortgage of the road.

This proposition was not accepted. The same proposition was offered by various members of our company, afterwards, from time to time, to various members of the so-called New Company; and the 1st inst., the following proposition was made, on behalf of the Old Company, in writing.

MARSHALL, Texas, February 1, 1859.

To the New Company:—We propose to pay fifty thousand dollars in cash, fifty thousand dollars in sixty days, the balance on the 15th day of May next; the road to be delivered to the Old Company, the stock books and franchises, and property of the New Company to be transferred to the Old Company, and mortgage bonds to be executed, secured upon the road, by the Old to the New Company, for the time payments. To make provisions for the small debts, and pay the judgments, and put a force at once upon the road to work.

Bonds payable in New Orleans.

(Signed,) R. V. RICHARDSON,
F. GORIN.

No answer has been received to this proposition, although time enough has elapsed for that purpose.

This was the best proposition that could be made, then, under the circumstances. The judgments in Harrison county were pressing, and must be paid, or the road would be sold under execution. There were small debts in the hands of men who had worked hard for them on the road. There was more justice in paying the honest working man, than in paying such debts as stock converted into money demands, and large bonuses, given to persons for lending their credit to the Company, and advancing some money for it. The President was in possession of a large amount of good paper given for the purchase of stock, on the condition, that in using it the road would be obtained. He could use neither the money or the paper unless he could get the road thereby. The proposition was believed to be liberal, because the cash payment was more than the amount directed to be paid by the Committee, in the award first above recited. If the proposition had been accepted, the President could have taken his paper to New Orleans and other moneyed centres, and have converted it into cash, and thus would have been able to pay the deferred payments easily, by the maturity thereof, and by the 1st of June have freed the Company from all embarrassments, and have resumed the construction thereof.

It is the opinion of this Convention, that the failure of a settlement thus far, has been produced by the so-called New Company; that all the consequences of such failure must rest upon them. If the consequences shall be ruin to the two contending parties, ruin to the great enterprise, unhappily the bone of contention, and the loss to the public of a

great Railroad, the responsibility is theirs, not ours. We offered them the best terms we had in our power to comply with, under the circumstances. If they had been accepted, all creditors could have gotten their money, by the 1st of June, for if we had gotten our road, our credit would have been restored. Our stockholders, and capitalists would have rallied around us; we could have realized our conditional sales of stock, and in total of men leaving the State of Texas with their money, which they had brought here to invest in our stock, and in constructing our road, we should have fixed the money and the influence of these good men, in the State. These evil and dire consequences may yet be averted, by a settlement of these troubles, on the basis of our propositions.

We have only wanted a full, fair, and candid investigation, before the committee, or any other person, of the claims set up against us. We wanted the items and vouchers, showing our indebtedness, produced; if the claim was a just one, we wanted to pay it; if not, we did not want to pay it, and leave just debts unpaid. The so-called New Company was composed of men, in part, who had stood in fiduciary relations to us. We wanted them to produce a proper statement of our moneys, which they had received, and show how they had disbursed it. There seemed to be large discrepancies in accounts and statements rendered; and a large apparent balance of money appeared to be unaccounted for. It may have been all properly expended, and these officers may be able to account satisfactorily for every cent. We wanted all these things made clear and plain by these parties who were in possession of the proper information. We could not get all the facts we wanted, from parties who ought to have them in possession. The committee had no power to compel these persons to produce this information. The whole investigation was embarrassed in this manner, and it was impossible for the committee to give a complete and satisfactory investigation to all of these claims, or do justice between the parties. They were embarrassed, and occupied a delicate and responsible position; to proceed might be to do wrong and injustice to one party or the other. They thought they had done enough to give the parties a basis for amicable settlement, and that they had better resign, and ask to be discharged from the further consideration of the subjects referred to them. In this view they doubtless tendered their resignation; and in this view it was accepted. Their subsequent action was precipitate and thoughtless, and was an absolute nullity.

The pretence that any rights were forfeited by not paying an unascertained debt on the 15th ult., is unsound. A tender was made, through extreme caution, by some gentleman to the Committee, in money and good negotiable paper, amounting to about \$33,000, an amount largely over the one-third awarded by the Committee. It was not necessary to make a tender. The President had sent persons long before the 15th ult., to investigate these claims before the Committee. The other parties would not go into the investigation either on or before the 15th ult. The President was detained by fog on the river, and could not reach Marshall on the 15th ult., but did reach there on the next day. He was prepared on the day he got here, although it was Sunday, to have paid the one-third that might be properly awarded against us.

We have still confidence in the sober second thought; and believe that when the gentlemen associated and calling themselves the New Company shall fully reflect upon the serious results that must inevitably follow the continuance of these troubles, as above indicated, they will find it consistent with their honor, duty and interest, to still accept a settlement on the basis above proposed, and which has been again tendered them, in the following written proposition.

OFFICE OF THE SOUTHERN PACIFIC R. R. COMPANY / MARSHALL, February 2, 1859.

L. P. Grant, President.—Sir: I am instructed by our stockholders and our directors to make to you and associates a proposition for the adjustment of difficulties.

1. We suspend the payment of half of Brown's debt, admitting its justice, until ownership be determined between claimants.

2. We suspend for individual adjustment, claims of W. P. Hill, F. Gariner, R. B. Rhodes, H. Wick and E. A. Blanche, agent, and E. A. Blanche, and J. P. Henderson, \$32,532.28; recognizing fully Brown's debt; also J. P. Henderson's—these debts on suspend a list by committee.

3. We call to Committee's approved list of \$138,934.40, the sum of \$32,455.55, being a total of \$161,479.95, to be fixed on the amount to be paid upon claims in first list, and the parties not included in item No. 2, above.

4. We will pay you upon this amount \$50,000, in cash; half the remainder on 15th March, and the balance on 15th May next.

5. We will refer the claims of Hill, Gardner, Rhodes, Wickland, Blanche, agent, E. A. Blanche, to the Hon. Judge Frazer for proof and final decision, and whatever be found due, to be paid four months from his decision.

6. We will pay off judgments and provide for all small debts due in Texas, and progress with the road, buying cars, locomotives, and iron to complete the road promptly to Marshall.

7. We will remove all liens, endangering your security, and pledge road and property and franchises for payment of deferred payment, with power of sale on default, sixty days after maturity of last payment, in New Orleans.

8. You delivering road in trust to G. G. Gregg, J. Marshall, Dr. Evans, Dr. Adams, and S. R. Perry, to be delivered up to us upon final payment, or back to you upon failure by us to pay as per 7th article in our proposition.

9. We will give you the following endorsements: R. V. Richardson, \$10,000; F. Garin, \$10,000; J. M. Conwell, \$10,000; T. H. Wiley, \$10,000; C. S. Todd, \$10,000.

10. We reserve the right, in thirty days, to give you cash or New Orleans acceptances, approved by McLeroy & Bradford, Scott, Williams & Co., having not over eight months to run at maturity, at current rates of discount in that market.

11. To avoid all trouble, &c., we will compromise the debts to H. L. Gariner, Rhodes, Wick and Blanche, agent, and E. A. Blanche, at half, and include the half in the last two payments, due 15th May.

Respectfully,

J. FOWLKES.

President S. P. R. R. Co., Texas.

From these propositions, it will be seen that the only difference in them from the award of the committee is, that we require the road to be delivered to us, or into the hands of third parties, to be delivered to us, upon the payment of the time instalments; but we give more than an equivalent therefor, in the payment of judgments and other debts.

We therefore advise our stockholders everywhere to permit the loan made to remain in the hands of the company until in the opinion of the company nothing can be effected as a settlement, at which time the company will return the loan to the stockholders who have made it.

1. Resolved, That the money loaned by the stockholders in the Southern Pacific Railroad Company, in the hands of the President and receivers, be deposited with the Treasurer of the Company, and by him deposited in the Bank of Louisiana or the Bank of New Orleans, at New Orleans, to be held subject to the order of the President and Treasurer, jointly, of the Southern Pacific Railroad Company.

2. Resolved, That as a compromise has not been effected, the President shall immediately commence preparing the suit now pending for trial, so as to terminate the difficulties at the earliest possible time.

3. Resolved, That the President of the Company immediately take possession of that part of the Southern Pacific Railroad, west of Marshall, and commence constructing the same as soon as practicable.

4. Resolved, That a committee of three persons be appointed by the President of this convention, to call upon W. R. D. Ward, late sub-treasurer, to furnish as early as practicable a statement of his account, with vouchers, as such officer of this company, and as stock agent.

Committee.—C. S. Todd, T. H. Wiley, and G. Lewis.

Resolved, That the foregoing preamble and resolutions be printed in circular form, and a copy sent to each stockholder, and to papers friendly to us, for publication.

I certify the above to be a true and correct copy of the preamble and resolutions adopted by the convention of stockholders, on this day.

D. C. WILDER, Sec'y.

February 2, 1859.

The foregoing are the main facts of the events of the last two weeks. The stockholders and the public can judge whether we are to blame for the failure of negotiations to settle the difficulties, and to remove this great enterprise from the litigation in which it is unhappily involved. I shall continue the contest. I shall not tamely submit to a surrender of my rights, even if deserted by every stockholder, of which I have no apprehension. I invite special attention to the proposition made, under the direction of the stockholders and directors, on the 2d of February. It will be found in my judgment, just to all, and we hope that it may yet be accepted.

J. FOWLKES.

FROM ARIZONA.

Correspondence N. Y. Times.

PORT BUCHANAN, ARIZONA,
Tuesday, Jan. 25, 1859.

The Apaches have just commenced killing whites. This morning at an early hour they killed two white men at "Whetstone Springs," twenty miles from this post, and carried their wives and families off captives. The men killed were Sergeants Melly and Berry, who had just been discharged from the 1st Dragoons, and were on their way into the States, with their families. They were accompanied by Sergeant Ryan and family, who was on his way to the States on furlough. Sergeant Ryan made his escape, but his wife was carried off captive. Several animals were stolen from the post the same night, it is supposed by the same party.

At the same time this party of Apaches were murdering these discharged soldiers, Capt. Ewell, with the Indian Agent, Dr. Stack, was making a treaty with them—showing how much a treaty is worth, made with this treacherous tribe of Indians.

It is hoped that now the Secretary of War will see the necessity of hurrying out troops, even if they are not destined to occupy Sonora.

Whetstone Springs is about 40 miles from Dragon Spring, on the mail route.

The President's message has been generally read, both here and in Sonora, where it is calculated to make a stir. Some of the inhabitants of Sonora are pleased with it, while others, and I think, the most, do not like the idea of our troops taking possession of the country. Many of them have friends in California, who, as soon as the Americans got

possession of the soil, were designated *Greasers*, and in some way driven out of the country. Smarting under this remembrance, it is not surprising that the land owners look with suspicion on any invasion of their territory, either by filibusters or by order of our Government.

Mining companies continue to arrive. The Santa Rita Company, from Cincinnati, arrived with ten wagons, loaded with tools and machinery, some days since. They are to work the old Salero mine in the Santa Rita Mountains. They commence operations with a better outfit than any Company that has yet come to the country.

The Sonora E. & M. Co. is the first Company to get out any quantity of silver. This Company are in possession of some very rich mines. They were discovered and occupied by Colonel Poston, as agent for the Company, about two years since. He has held possession and worked the mines under great disadvantages, and is entitled to much credit for his untiring energy; for if this Company had not succeeded few others would have dared to follow. The Company is now under the charge of Mr. Lathrop, formerly of Buffalo. Mr. L. is putting up extensive machinery, sufficient to reduce 6,000 pounds of ore in twenty-four hours. From one furnace he is getting about \$100 a day in pure silver. The works are nearly completed, and are as substantial and strong as wood and iron can make them. The extent may be estimated from the fact that it requires 2,500 pounds quicksilver to start them.

The prospect of acquiring Sonora has started a number of speculators into the Territory. Not long since Major McCulloch and Judge Rose, (Consul at Guaymas,) passed through here on their way to Guaymas. The impression is that they are after a railroad grant or charter, but if this is all, they have little chance of success, as the acting Governor, Pesquiera, has issued his annual message, in which he says it will be time enough for the Legislature of Sonora (?) when the citizens of the United States build it to the line.

The subject of this railroad was agitated two years ago, and H. Ehrenberg, the engineer of the Sonora Mining Company, made a survey and report on the subject. It will be found impossible to build a road through Chihuahua, as the mountains are impassable, but an easy route is found, leaving what is termed Grey's route, or, in fact, any 32d parallel route, at Calabazas or Tubac, reaching Guaymas over an easy grade in 330 miles, or reaching the Gulf at Lobos, said to be a good port, in less than 250 miles.

Opening the ports of Guaymas and Lobos is what is wanted for this Territory. It will be worth more to us than a Territorial Government, which is a question on which the inhabitants are divided. We can not really see the great advantage to be derived from such an organization. All we really require is a county organization, with protection by the General Government from Indians. TUBAC.

SHELBY RAILROAD.—We are pleased to learn that the Directors of the Shelby Railroad have obtained the services of Mr. Wm. Gunn, Civil Engineer, and that he is now engaged in a survey and estimate of the road. Mr. Gunn acquired great reputation as an Engineer on the Lexington and Danville Railroad; and his estimates were so correct, that, although the work on some sections had passed through the hands of three contractors, there was only a variation of four per cent.—as accurate an estimate, we venture to assert, as was ever made by an Engineer.—*Shelby, Ky., News.*

MONETARY AND COMMERCIAL.

There is no new feature to report relative to the money market since our last issue. The regular houses have been enabled to absorb nearly all the offerings at regular rates. Every thing wears a moderately easy appearance. The truth is, that most of our Merchants and Manufacturers have been thoroughly straightening up their business, and they owe less, and have more on deposit, than has been the case for many years. Hence, as there are no speculative movements now going on in any department of trade, except those previously noticed in groceries and provisions, which, however, are not being increased at the present time, the demand for money is light, and the supply is fully equal to the demand. As a great commercial center, we are but very poorly supplied with banking facilities at best, there being many little country villages in New York and the Eastern States, that have more real banking capital than is to be found in the Queen City. This, however, has taught our business men to rely more upon their own resources, and keep their business more under their own control and within their own means, and may, in this sense, perhaps, be considered beneficial.

As the new law relative to interest takes effect on the 1st of April, those having money to invest on real estate security are anxious to get it out of their hands before that date. Some difficulty is experienced in finding satisfactory borrowers for the amount of capital in the market.

Eastern Exchange is scarcer than at our last issue, though without any change in rates.

Below we give a card of the New Southern Pacific Railroad Company:

OFFICE OF THE SOUTHERN PACIFIC R. R. COMPANY,
MARSHALL, Texas Feb. 2d, 1859.

WHEREAS, The Southern Pacific Railroad Company can now, for the first time since its organization, make propositions to the *bona fide* Stockholders of the "sold-out Company," for their admission into our Company, upon fair and equitable terms, without subjecting themselves, to misconstruction, or our motives to misrepresentation. Therefore,

Resolved, That any holder of *bona fide* Stock of the Sold Out Company, upon which previously to the 1st day of June, 1858, there has been paid fifty dollars, and who shall pay to this Company fifty dollars, in cash, shall receive one share of full paid Stock in this Company, and that this resolution shall have full force and effect till the last day of March, 1859, and not thereafter.

I, W. R. D. Ward, Secretary of the Southern Pacific Railroad Company, do hereby certify that the above and foregoing Preamble and Resolution is a true copy of the original now on record in my office.

Given under my hand and seal of office, in the city of Marshall, February 2d, 1859.
W. R. D. WARD,
Sec'y S. P. R. R. Co.

ON BOILER-PLATE JOINTS.

In the discussion of boiler-plate joints, which we find in the London *Artizan* for December, Mr. Clark demonstrates that the bursting strain on the longitudinal seams of cylindrical boilers is double the strain on the circular seams. This is an important practical distinction, because it is clear that, to ensure uniform working strength, the longitudinal seams must be doubly fortified; and, in the consideration of the means of soldering, four distinct kinds of riveted joints are compared, and their relative strengths determined from actual trials.—Welded joints are likewise discussed, and should the reported results of their capabilities to resist bursting strains be corroborated by advanced experience, they promise to supersede riveting, if not entirely, at all events for the principal joints. In the order of tensile strength the joints are ranged thus:

1. Scarf-welded joint.....100
2. Double-riveted double-welt joint.... 80 per cent.
3. Double-riveted lap-joint..... 72
4. Lap-welded joint..... 66
5. Double-riveted single-welt joint..... 65
6. Single-riveted lap-joint..... 60

In this comparative statement the strength of the entire plate is represented by 100; and the trials were made with plates varying from $\frac{3}{4}$ to $\frac{1}{2}$ inch in thickness. The relative strengths of single and double-riveted joints do not very materially differ from those deduced by Mr. Fairbairn.

McCALLUM, BRISTOL & CO.,
BRIDGE & DEPOT BUILDERS.

McCallum, Bristol & Co., are prepared to construct McCallum's PATENT INFLEXIBLE ARCH TRUSS BRIDGE, for Railroad and Highway purposes at any point in Ohio, Indiana, Illinois, Missouri, Iowa, Wisconsin and Minnesota on as favorable terms as any other bridge, and in the most approved and perfect manner. Parties designing information, will please apply to the firm at their Office 99 Third St., Cincinnati, or to McCallum, Seymour & Hawley, No. 110 Broadway, N. Y. Ag. 26.

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about lbs per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by
March 1858. VOSE, LIVINGSTON & CO.,
Feb. 25. 1. 9 South William St., N. Y.

PROSSER'S PATENT
ORIGINAL LAP-WELDED
IRON AND STEEL BOILER TUBES,
SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.
SOLE IMPORTERS.

PROSSER'S PATENT SURFACE CONDENSERS for high pressure steam, with sea or other bad boiler water, gauges, 3-cutter drills, counter-sinks, tube end cutting bars, expanders, tube scalers, steel wire and whalebone brushes, pall lever wrenches, tubes—plain or enameled, screwed together for Artesian Wells, Hollow Shafts for various purposes, Steel for Rollers.
TIOS. PROSSER & SON,
27 Jan. 28 Platt Street, New York.

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MILITARY INSTITUTE,

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, but more extended in Mathematics, Mechanics, Machines, Construction, Agricultural Chemistry and Mining Geology; also in English Literature, Historical Readings, and Modern Languages, accompanied by daily and regulated exercise.

Schools of Architecture, Engineering, Commerce, Medicine, and Law, admit of selecting studies to suit time means, and object of Professional preparation, both before and after graduating.

The twelfth annual term is now open. Charges, \$102 per half-yearly session, payable in advance.

Address the Superintendent, at "Military Institute, Franklin Springs, Ky.," or the undersigned.

P. DUDLEY,
President of the Board.

Jan. 5. 11.

LANE & BODLEY
MANUFACTURERS OF
WOOD WORKING MACHINERY,

AND
CIRCULAR SAW MILLS.
Lane & Bodley's celebrated Power Mortising Machine and all Machinery used in Rail Car Shops.
Corner John and Water Sts., CINCINNATI, O.
Jan. 5. 11.

WRIGHTSON & CO.,
BOOK & JOB PRINTERS,
NO. 187 WALNUT STREET,
CINCINNATI, O.

Public attention is respectfully directed to this establishment, in the assurance that ample satisfaction will be given as regards Typography, Press Work, and Charges, to those who may require Ornamental, Common, or Book Printing, Printing from Stereotype Plates. We are better prepared to do business in this line than other house in the West.

Druggists Labels,
Are printed in the neatest manner, in Gold Silver, or Copper Bronze, on Satin, Splendid Glazed Colored Papers, or Cards, unequalled for brilliancy, at very low prices.

APFLEGATE & CO.,
Booksellers, Publishers, Stationers & Blank
Book Manufacturers,
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PATENTED GAS WORKS

OF THE

AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circulars which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the Aubin Works, the retort is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE
GAS WORKS.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet,.....		\$300 00
do do	350 "	335 00
do do	400 "	375 00
do do	500 "	450 00
do do	600 "	525 00
do do	700 "	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, as now in operation in several States, apply to

E. T. COVERDALE,

167 Walnut Street, Cincinnati, Ohio,
who has the exclusive right to manufacture and sell in the State of Ohio.
Feb. 24th, 1859.

1,200 Kegs No. 1 Railroad Spikes, $\frac{5}{8}$ by 9-10th, Corby, Gossin & Co.'s make for sale very low by
TRAVER & AUBERY,
7 Public Landing

Union Works, Baltimore.

POOLE & HUNT, Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

CASHPOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ANDERSON, GATES & WRIGHT, STATIONERS, BOOKSELLERS, —AND—

Blank Book Manufacturers, No. 112 MAIN STREET,

East Side, between Third and Fourth Streets, KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS.
Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,
(Successors to JACOB ERNST.)
112, Main Street, Cincinnati

SCHENECTADY Locomotive Works, SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,

AND TENDERS, AND RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding the work to any part of the country, without delay.

JOHN ELLIS, Agent. WALTER McQUEEN Sup't.

N. B.—We have two Fire Engines on hand suitable for the 4 feet 10 in. gauge. Cylinders 16 inches diameter, 22 inches stroke. Driving wheels 4½ feet diam. December 18th, 1858.

D. M. CARHART, TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address Respectfully Yours,

D. M. CARHART,
Box 183 Cleveland, Ohio.

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G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

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CHILLED WHEELS AND

TIRES,

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO
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FOR THEIR

CELEBRATED WHEELS,
EITHER SINGLE OR DOUBLE PLATE.
WITH OR WITHOUT AXLES.

WHEELS FITTED To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

ap23

TUBULAR RAIL.



Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America, by STEPHEN & JENKINS, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:

The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside face as solid rails of 60 lbs. per yard.

Its density is greater.

Its welding nearer perfect, and

Its durability superior.

Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

Reference is made to the officers of the railroad in the vicinity of Cincinnati.

Additional particulars and circulars addressing E. W. ST. CINCINNATI, Ohio.

June 17.—1yr.

AMERICAN AND FOREIGN PATENT AGENT.

THOMAS D. STEINSON,

SOLICITOR OF PATENTS,

And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

Winter Arrangement.

BALTIMORE AND OHIO

RAILROAD.

GREAT NATIONAL ROUTE.

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood, and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the

West, South-West and North-West.

TWO TRAINS

Leave Wheeling daily, at 12:30 P. M., and 10:26 P. M.

Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.

Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone, by other lines.

Time as quick and fare as low as via any other Route.

Inquire for tickets via the Baltimore and Ohio Railroad, at any of the principal Railroad Offices in the West.

E. F. FULLER, Gen'l Western Agent.

L. M. COLE, General Ticket Agent.

W. P. SMITH, Master Transportation.

HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true high of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,
Jy30 No. 66 Broadway, N. Y.

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

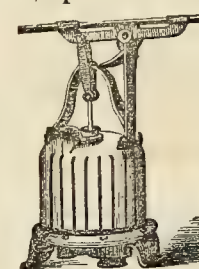
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings, Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair

Ohio Mechanics' Institute. June 18, 1855—15

ENGINEERING!!

The undersigned is prepared to furnish

SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c

Particular attention given to the superintending of

LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description,

While under construction.

AGENT FOR THE PURCHASE of, on commission

all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES

METALLIC SELF ADJUSTING CONICAL PACKING,

DUDGON'S HYDRAULIC JACK,

Also, for Water Gauges, Indicators, Steam Whistlers

CHAS. W. COPELAND,

Consulting Engineer,

64 Broadway, N. Y.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,

THEODORE DEHON,

at Broadway, New York,

no13 10 Wal

BALTIMORE AND OHIO RAILROAD. GREAT NATIONAL ROUTE —TO— WASHINGTON CITY, BALTIMORE, PHILADELPHIA, NEW YORK, AND BOSTON.

THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK AND BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

WASHINGTON CITY.

TWO TRAINS LEAVE CINCINNATI DAILY, (Sundays Excepted.)

9 A. M. and 11:30 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 9 and 11:30 P. M. trains.

The above Trains arrive in Baltimore at 7:35 A. M., 5:05 P. M., in Washington 10:40 A. M., 7:05 P. M.

Inquire for Tickets via BALTIMORE & OHIO RAILROAD.

FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:30 A. M., 8:50 A. M., 3:30 P. M., and 5:30 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK AND BOSTON.

FOR THROUGH TICKETS.

And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRES-COTT SMITH, Master of Transportation Baltimore and Ohio Railroad.

L. M. COLE,
General Ticket Agent.
E. F. FULLER,
General Western Agent.

MOSELEY'S TUBULAR WROUGHT IRON



ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs are wholly of Wrought Iron, or mixture of Wood and Iron; Sheet piling always Iron.

The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary bridges.

We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O. may 13. MOSELEY & CO.

LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY, NOVEMBER 29th, 1858, Trains leave Cincinnati as follows:

9 A. M. DAY EXPRESS—Stopping at Way Stations.

4:15 P. M. ACCOMMODATION—For Xenia and Springfield, stopping at intermediate stations.

11:30 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Corwin, Xenia, and London

Connections are Made by the 9 A. M., and 11:30 P. M. Trains for

ALL THE EASTERN CITIES.

The NIGHT EXPRESS Train leaving Cincinnati at 11:30 P. M., runs daily, except SATURDAYS. The other trains run daily, except SUNDAYS.

FOR THROUGH TICKETS

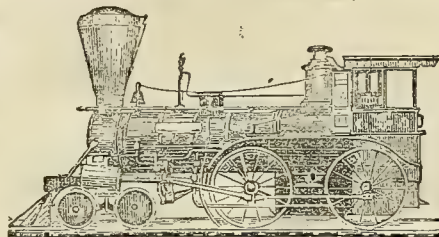
And all information, apply at the Offices, Walnut Street House, bet. Sixth and Seventh; No. 1 Burnet House; south-east corner of Broadway and Front streets, and at the Jastrow Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Superintendent.

Omnibus calls for passengers.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20 MOORE & RICHARDSON.

1858 CINCINNATI AND ST. LOUIS.

Through without Change of Cars,
OHIO & MISSISSIPPI
(BROAD GAUGE)



RAILROAD.

TWO DAILY TRAINS FOR
Louisville, Vincennes, Evansville,
Cairo, and St. Louis,

At 9:00 A. M. and 10:30 P. M.,

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M. ACCOMMODATION TRAIN at 5:20 P. M., daily, (Sundays excepted,) for Seymour.

FOR THROUGH TICKETS

To all points West and South please apply at the Union offices, No. 2 Burnet House; south-east corner Broadway and Front street, and at the Depot, corner Front and Mill streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Snow Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, STROBRIDGE & CO.,
jan 8 ly 119 Walnut st., Odd Fellows' Building

Monday, Nov. 29, 1858.

Cincinnati, Hamilton & Dayton RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 00 A. M.—Dayton, Toledo, Sandusky and Detroit Mail express. Also for Lima and Chicago.

6 00 A. M.—Richmond, Indianapolis and Chicago Express

8 40 A. M.—Cleveland and Pittsburgh Express.

4 30 P. M.—Dayton, Sydney and Sandusky Night express.

4 30 P. M.—Richmond, Indianapolis and Chicago Express.

5 40 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR
ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6:00 A. M.—Dayton Mail Train—For Springfield, Sandusky and all points on that road. Connects at Urbana for Columbus; arrives at Columbus at 12 noon; at Forest with trunks East and West; at Clyde for Toledo, Detroit and Chicago, arriving at Detroit at 7:30 P. M. Also at Clyde with trains for Cleveland, Buffalo, &c. Passengers by this train dine at Forest, at 12:30 P. M.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Fort Wayne and the West; at Sydney for Union, Muncie, Winchester, and points on the B & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

6:00 A. M. Train for Richmond, connects with Indiana Central Road for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

8:40 A. M.—Cleveland and Pittsburgh Express, via, Delaware Cut Off—For Cleveland, Dunkirk, Buffalo, New York and Boston. Also makes close connections at Cressline for Pittsburgh, Philadelphia, Baltimore, and all Eastern cities.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburgh and the East.

4:30 P. M.—Indianapolis and Chicago Express.—Connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

5:40 P. M.—Train for Hamilton and all way stations

RETURNING TRAINS

Leave Dayton at 8:20 A. M., 4:15 P. M., and 7:30 P. M.

Leave Hamilton at 7:00 A. M., 9:17 A. M., 11:30 A. M., 5:42 P. M., and 9:05 P. M.

TRAINS ARRIVE IN CINCINNATI.

From Hamilton 8:05 A. M., and 12:40 P. M.—From Dayton at 10:52 A. M., 6:50 P. M., and 10:10 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio
LEE & LEAVITT

The Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

Thursday Morning, March 3, 1859.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.
One square, single insertion, \$1 00
" " per month, 3 00
" " six months, 12 00
" " per annum, 20 00
" column, single insertion, 5 00
" " per month, 10 00
" " six months, 40 00
" " per annum, 80 00
" page, single insertion, 15 00
" " per month, 25 00
" " six months, 110 00
" " per annum, 200 00
Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

THE ELEMENTS AND OPERATIONS OF RAILROADS IN OHIO FOR 1858.

We have before us a proof sheet of the Report of the Commissioner of Statistics, (E. D. MANSFIELD,) on the Railroads of Ohio. We shall give an analysis of it, with some comments under each head.

1. ELEMENTS OF THE ROADS.

Number of Roads.....	31
Length, including Branches and Double Roads.....	2,983 miles.
Locomotives (estimating for five roads not returned).....	600
Wood consumed.....	250,000 Cords.
Coal consumed.....	10,186 Tons.
Number of employees.....	7,000
Number of Passenger Cars.....	500
Number of Freight Cars.....	7,000

In this table, we have filled out the blanks (estimated), for six roads, which made no return of their machinery, fuel, or cars.

In regard to fuel, coal is only used on two roads—the "Iron-ton Road," and the "Cleveland and Pittsburg." The latter consumes 9,955 tons of coal. Wood is now disappearing at so rapid a rate, that we have no doubt, coal will soon be used on the majority of roads. A heavily timbered tract will produce fifty cords to an acre; but woodland, as it comes, will not yield more than twenty-five cords. At this proportion, 10,000 acres are cleared each year for railroads alone! This wood, to be at a moderate price, must be cut within five miles of the road, and in that

space; more than half the land is already cleared. It is plain that within ten years, the majority of railroads must burn coal. It seems to us good policy, for most of them to commence now; but, that is a point they will settle by experience.

2. OPERATIONS OF THE ROADS.

The following comprises what the roads have done in 1858:

Passengers carried over the whole of the Roads.....	1,180,725
Passengers carried over part of the Roads.....	2,681,415
Whole number of passengers carried by all the Roads.....	3,762,140
Tons of Freight carried over 14 Roads.....	2,114,839
Estimated for 16 Roads.....	2,000,000
Aggregate.....	4,114,839
Number of miles run by 21 Roads.....	6,647,843
Estimate for residue.....	2,000,000

Aggregate.....	8,647,843
Average speed per hour.....	23 miles.
" " of Freight cars.....	12 "
Average number of miles to each locomotive.....	14,000 "

3. RECEIPTS AND EXPENSES.

Receipts.....	\$13,903,225
Gross Expenses.....	8,698,643
Net receipts.....	5,204,582

This account includes the Ohio and Mississippi, and the Northern Indiana Road (70 miles of which, terminating at Toledo, is in Ohio); and this makes the total of these 21 roads, perhaps fifteen per cent. more than it should be. The ratio, however, would remain about the same.

4. PROFITS.

The result shows, that the aggregate profits on the railroads of Ohio, have been about four per cent. Examining the results of each individual road, we find that the profits vary from less than nothing to fifteen per cent., which was made by the Cleveland, Painesville and Ashtabula Road. This fact shows that if the railroads had been constructed *without debt*, the owners would now be enjoying not a large, but very handsome income.

5. STOCK AND DEBTS.

The tables also show, that the Stock and Debts of the Roads were divided as follows:

Stock.....	\$70,638,215
Aggregate Debt.....	85,600,175
Total.....	\$156,238,390

This includes the five roads we have referred to as running beyond the limits of the State. The classification of debts was as follows:

First Mortgages.....	\$37,163,550
Second Mortgages.....	17,235,250
Third Mortgages.....	8,129,300
Income and Floating Debt.....	13,332,395
Total.....	\$75,860,495

This excludes the debt of the Michigan Southern & Northern Indiana, which amounts to more than ten millions; but includes the debt of the Ohio and Mississippi.

Some of the roads, such as the Cleveland, Columbus and Cincinnati, Little Miami, Columbus and Xenia, and the Cincinnati, Hamilton and Dayton, have, either no debt, or, relatively a small one; but, in general, the embarrassments of the roads is very great.

The cost, per mile, of some of the leading roads, is as follows, viz:

Central Ohio.....	\$45,000 per mile.
Cincinnati, Hamilton and Dayton.....	60,000 "
Cincinnati, Wilmington and Zanesville.....	48,000 "
Cleveland, Columbus and Cincinnati.....	36,000 "
Cleveland, Painesville and Ashtabula.....	42,000 "
Little Miami, Columbus and Xenia.....	40,000 "
Marietta and Cincinnati.....	60,000 "
Steubenville and Indiana.....	38,000 "

It will be seen, that the cost of roads in Ohio, are by no means as small, as we rated them, when writing on the subject several years since. We admit the fact at once; but utterly deny either the intention or the fact of error, at the time of writing. We assumed the data of engineers, and the actual experience of roads, at the time. We reasoned upon such facts as we had. But railroad operators steadily kept out of view, several leading facts of importance—all of which have since been disclosed; and to which are due nearly all the railroad embarrassments of the country, viz:

1. No sufficient estimates were ever made for the cost of machinery and depots. These have cost four-fold any estimates which have been made.

2. No allowance was made for the two great items of Discount and Interest, amounting, in some roads to full 20 per cent.

3. No statement was made, of the heavier, and more costly iron required.

4. No allowance was made for the advancing prices of the country, under the influence of gold.

The two last items, perhaps, no one was to blame for. It could not be foreseen, that labor and iron would rise, as they actually did, full 40 per cent. on the prices of 1853.

The resulting consequence of these omissions, was, to increase the cost of the roads more than 50 per cent., and to put that increase in the shape of debt. It is this, and this alone, which has caused the great embarrassment of many roads,—by enhancing the cost beyond all calculation, and making that advanced cost a burdensome debt. It takes the profit of several years to pay off these incumbrances, or, even to get the roads into such a condition, as will fully equip them, and pay the interest. When this is done, we can see no reason, why they may not look forward, (even the most embarrassed) to tolerable profits in the future.

The Commissioner closes his summary of railroad operations, with the following paragraphs:

"But few of the roads declare dividends; but, several, such as the Little Miami, Columbus and Xenia, Cincinnati, Hamilton and Dayton, Cleveland, Columbus and Cincinnati, Cleveland, Painesville and Ashtabula, Cleveland and Toledo, with one or two others have made large profits. The net proceeds of the roads, counted on the aggregate cost, was as follows:

Cleveland, Painesville and Ashtabula.....	15 per cent.
Cleveland, Columbus and Cincinnati.....	12 "
Little Miami, Columbus and Xenia.....	8 "
Cincinnati, Hamilton and Dayton.....	7 "
Cleveland and Pittsburg.....	3 1/2 "
Cleveland and Toledo.....	6 "
Indianapolis and Cincinnati.....	7 "
Central Ohio.....	2 1/2 "
Bellefontaine and Indiana.....	4 "

A revival of good crops and commercial prosperity will enable four-fifths of the roads

of Ohio to make reasonable dividends. The above roads cost about \$17,000,000, and pay about \$3,200,000 nett profit, which is near 7 per cent. on cost.

In regard to *casualties*, the reports of both companies and coroners show that there has been very few indeed, and but one in which any proper complaint could be made of the road or company."

The year 1859 opens with a very fair prospect of good business, and good returns for railroads. We anticipate, if not perfect prosperity, certainly much better fortune, and more stable hopes, than their proprietors have had since 1854. We can not make the future what we would; but, there is every thing in the condition of the country now, to augur a better state of things.

LETTER FROM W. WRIGHTSON.

SANTA RITA, ARIZ., Jan. 28, 1859.
T. WRIGHTSON, Esq.:

Dear Sir:—In my last, I gave you a sort of general summary of the doings of the Company up to the date of writing. Since then we have been occupied in finishing the improvements necessary to put on our house, pushing forward the work on the Salero and visiting some of the other mines of the Company.

The Salero has now been opened to such an extent, as to give the most undoubted evidence that the old workings were much more extensive than we had previously imagined—a fact which satisfies us that the mine was a favorite one. There is also evidence that those who worked it most recently, had dug away some of the old pillars left by the early miners, and partially dug into others at the time they were forced to suspend operations. All this renders us the more anxious to get to the bottom of the old workings, and then commence in a regular and scientific way. I have arranged with the Agents of the Sonora Exploring and Mining Company, that Mr. Brunchow shall visit the mine in about ten days from the present time, and then we shall be guided somewhat by his judgment as to our future course with the mine. The plan we most favor now is, to continue the operation of cleaning out, and, at the same time, to sink a shaft at the foot of the mountain on the vein, and run an adit on the vein till we strike the old workings. In this manner we expect to make the new work at least pay for itself, and probably more, while deeper workings under the mountains must certainly yield richer ores.

On Monday last, in company with Mr. Grosvenor and Mr. McCarty, I visited the Bustillo Mine, the Crystal Mine, and the Ojero. The Bustillo Mine, like the Salero, was mainly worked from an opening about two thirds the way up the mountain, but the whole course of the vein has been opened by successive diggings for about a quarter of a mile. The main shaft is filled with water. There is a mezquite tree growing at the entrance of the shaft. There is another shaft just above this into which we climbed, and by picking into the rock with our mining pick, found a very fair show of metal. This vein pleased us all much. We have sent specimens of the ore to Cerro Colorado for assays, as we are not prepared to make them with sufficient accuracy to satisfy ourselves.

The Crystal Mine is situated about half a mile beyond the Bustillo and up the arroya. It also has been opened some distance up the mountain. The ore of the Crystal Mine con-

tains more lead, arsenic, and antimony, than those of the Salero, and is very heavy. The vein runs wide and full. We suppose the yield of silver to be small, but for its exact amount must wait for the results of assay. We design to send a carga (300 lbs.) of this ore over to Cerro Colorado, to be smelted. The Crystal Mine gives the largest show of metal of any of the mines now opened, and, in my opinion, can now be worked with profit. It will, however, require a large number of men to make this mine very profitable, as the per centage of the ore can not be very great, at the present depth, ten feet only. At the depth of a hundred feet or more, I have no doubt the results will be more satisfactory. Our aim will be to carry a shaft down all our mines to a sufficient depth to reach the compact vein and better metal than we can expect at the surface. In Lower Mexico this is sometimes attained at the depth of a hundred yards, but generally deeper. Here we find the rich metal much nearer the surface.

The Ojero Mine is situated on the crest of the ridge containing the Salero, and has not been very extensively worked. The ore that we found near the old shaft showed very well. We do not propose to work this mine from the old diggings. They are too high up. We design, as soon as we can procure peons and feel able to begin, to open a shaft near the foot of the mountain, and work in towards the center. This will reach the vein by less work than sinking from the summit.

Of the difficulties of getting all these various workings fairly started, I can convey no just idea. We have had to make roads, clear away brush, cut away sharp pitches, &c., &c., all of which things take time; but when done, they are done forever, and become permanent improvements. We will push them all forward as rapidly as we have the ability.

In my last I alluded to the negotiations going on for the purchase of the Mission and Rancho, of Tumacacori. I am happy to inform you, that I have to-day completed a safe arrangement, by which we obtain immediate possession of the Mission and Rancho.

The Rancho is the finest one in the whole valley of the Santa Cruz River, and is the only piece of property here really desirable for our company. In the days of the old Mission, several silver mines were worked in its immediate neighborhood, and their ores reduced at the Mission. We shall take immediate steps to re-discover these mines if possible, and open them for the benefit of the company. The substantial, and, I might also add, gorgeous character of the old Church, and other buildings connected with the Mission, warrant the belief that the mines which supported it paid their workers very handsomely. By this purchase, the company have an excellent garden well watered, with a fine acequia, containing grapes and pear trees, and in which we hope to raise all the vegetables we shall need for the year; several well watered fields in which to cultivate corn, barley, beans, &c., &c., and abundant land bordering the river, for the purpose of erecting their work shops, &c. The mines in the San Coyetano Mountains, which, Mr. Poston informs us, yielded about one hundred dollars of silver to the ton of ore, are convenient to this Rancho, and we hope soon to be able to put a force at work on them. They do not offer as fair a prospect as those we are now working, but will, I think, pay a profit, and add to the receipts of the company.

Hoping that the Directors will approve of the steps I have taken to advance the interests of the Company, I am truly yours,

W. WRIGHTSON.

R. R. CENTERING IN CHICAGO.

We condense the following very interesting article from the *Chicago Daily Press and Tribune*, one of the very best statistical papers published in this country:

CHICAGO AND MILWAUKEE R. R.—Mahlon B. Ogden, *President*; A. S. Downs, *Secretary*; H. A. Tucker, *Treasurer*; M. L. Sykes, *Superintendent*, Chicago. This road connects Chicago with Milwaukee. Length, 85 miles.

Receipts.	Pass.	Freight.	Mail & Mis.	Total.
January.....	\$9,300 12	4,889 05	271 31	14,480 55
February.....	7,938 12	3,918 29	1,369 85	13,216 26
March.....	11,625 14	5,493 13	289 84	17,408 11
April.....	14,469 50	4,575 25	1,112 07	20,156 82
May.....	13,256 43	3,110 91	1,686 20	18,053 54
June.....	12,636 61	1,518 30	1,855 79	17,230 70
July.....	12,791 42	2,556 35	1,200 22	16,547 99
August.....	12,018 58	2,129 68	683 06	14,901 32
September.....	13,000 95	3,132 61	1,653 87	17,887 43
October.....	14,719 04	5,326 16	563 01	20,608 21
November.....	12,467 90	3,940 23	1,537 35	17,945 48
December.....	10,242 94	4,993 46	561 34	15,797 74

Totals.....145,586 54 46,363 40 12,235 91 204,186 15

The following table shows the total movement of passengers, but as the number North and South are not stated, it is not so valuable as it otherwise would be:

Movement of Passengers. North and South.

	Through.	Way.	Total.
January.....	5,203 1/2	4,709	10,012 1/2
February.....	4,581 1/2	3,869	8,450 1/2
March.....	6,934 1/2	5,189 1/2	12,124
April.....	8,726	6,269 1/2	14,995 1/2
May.....	8,030	5,795	13,825
June.....	7,921 1/2	6,193 1/2	14,115
July.....	6,626	7,385 1/2	14,011 1/2
August.....	6,895	7,581	14,476
September.....	7,642	7,228	15,070
October.....	7,842	7,328	15,170
November.....	7,921 1/2	5,874 1/2	13,610
December.....	6,015 1/2	5,087 1/2	11,103

Total.....83,846 72,373 156,219

The first Branch Road running west from the Chicago and Milwaukee is the

KENOSHA & ROCKFORD R. R.—Josiah Bond, *President*; Levi Burnell, *Secretary*; Chas. H. Sholes, *Treasurer*; C. L. Prescott, *Supt.*; W. H. Noble, *Chief Engineer*, Kenosha, Wis.

We have received no report from this road. Eleven miles were finished last year. Projected to run from Kenosha to Rockford, and thence to Rock Island. Length to Rockford, 80 miles. As the next Branch Line we notice the

RACINE AND MISSISSIPPI R. R.—H. S. Durand, *Pres.*; A. J. Redburn, *Sec'y*; Wm. M. Perine, *Treas.*; Rob. Hareis, *Supt. and Chief Eng.*, Racine Wis.

Receipts, Passengers.	Freight.	Mail & Mis.	Total.
January.....	\$3,346 12	\$6,268 58	\$9,714 70
February.....	2,623 29	6,484 00	9,107 29
March.....	3,725 15	6,012 29	10,637 44
April.....	3,708 84	7,312 87	11,640 71
May.....	3,313 63	11,996 27	15,309 90
June.....	3,443 01	17,142 07	20,585 08
July.....	4,341 05	12,441 50	16,882 55
August.....	3,160 90	7,554 99	10,715 89
September.....	4,027 55	13,051 46	17,079 01
October.....	3,722 95	11,895 52	15,618 47
November.....	3,150 11	7,424 82	10,574 93
December.....	2,561 60	4,934 48	7,496 08

Total.....\$41,151 20 114,077 85 155,229 05

Movement of Passengers.

	Total West.	Total East.
January.....	2369	2601
February.....	2073	1187
March.....	2511	2766
April.....	2730	2773
May.....	2700	2583
June.....	2475	2350
July.....	2958	2990
August.....	2967	2301
September.....	2635	2574
October.....	3137	2991
November.....	2554	2334
December.....	2056	2054

Total.....30,765 30,344

This road is completed to Durand, 86 miles

west of Racine. As an extension line of the C. & M. R. R. we notice the—

LA CROSSE AND MILWAUKEE R. R.—S. C. Chamberlain, Cleveland, Mortgagee in possession. Dwight W. Keyer, Milwaukee, *Cashier*. Edwin H. Goodrich, *Manager*.

	Receipts, Passengers.	Freight.	Mail & Mis.	Total.
January.....	\$10,702 07	12,758 24	775 86	24,236 17
February.....	8,946 46	10,651 00	437 82	20,035 28
March.....	12,679 38	10,340 48	544 70	23,564 56
April.....	13,785 21	17,552 25	2,053 03	33,390 49
May.....	17,912 93	23,803 76	632 74	42,349 43
June.....	15,043 54	28,153 79	678 21	43,875 54
July.....	17,316 34	28,267 40	2,025 27	47,609 01
August.....	16,885 08	26,029 05	767 90	43,682 12
September.....	23,714 34	37,258 03	2,339 18	63,301 55
October.....	28,357 97	32,255 48	941 17	61,551 54
November.....	27,003 05	26,944 10	1,054 83	55,001 98
December.....	13,368 92	18,957 58	456 55	36,823 05

Total.....\$205,745 19 269,941 16 16,767 45 492,453 80

Movement of Passengers.

	West.			East.		
	Thro'.	Way.	Total.	Thro'.	Way.	Total.
January.....	135	3378	3513	192	3406	3598
February.....	109	2625	2734	349	2562	2841
March.....	178	4348	4526	201	3884	4085
April.....	152	5482	5634	91	4132	4223
May.....	78	5604	5682	60	4350	4410
June.....	56	5476	5532	55	4477	4532
July.....	51	5242	5293	68	4773	4841
August.....	109	4963	5072	89	4776	4865
September.....	339	6120	6459	450	5471	5921
October.....	602	5815	6417	437	6857	7294
November.....	562	5837	6399	583	5120	5703
December.....	387	3943	4280	470	3622	4092

Total.....2,648 58,773 61,421 3,045 53,370 56,415

This road was open for business to La Crosse, 180 miles above Galena on the 1st of October, 1858. Its length is now 200 miles. Opposite La Crosse, at La Crescent, the Root River Valley or Southern Minnesota Railroad is in process of construction. It is to run north-west to Mankato at the south bend of the Minnesota. It will undoubtedly form, with the Minnesota and Cedar Valley Road, a link in the first line of railroad that will be opened between St. Paul. Its affairs are in a very encouraging condition.

As a projected extension of the La Crosse Road, we notice the

HUDSON AND SUPERIOR R. R.—John Lockwood, Milwaukee, *Pres.*; A. V. Barringer, Cincinnati, *Sec'y*; H. V. Silkman, Hudson, Wis., *Eng.*; M. L. Noyes, New York, *Contractor*. Road to run from Hudson to Superior, at the head of Lake Superior, 150 miles, with branch to Byfield, eighty miles—all under contract. Twenty miles at each end of main line to be done this year; all to be done in three years. Has a valuable grant from Congress of farming, timber, and mineral lands to aid in its construction. Our next grand trunk line is the—

CHICAGO, ST. PAUL AND FOND DU LAC R. R.—W. B. Ogden, *Pres.*; S. B. Redfield, *Sec'y*; George P. Lee, *Treas.*; Geo. L. Dunlap, *Supt.*, Chicago. Road completed from Chicago to Janesville, 91 miles, and from La Crosse Junction to Oshkosh, 47 miles. Fifty-six miles between Janesville and La Crosse Junction ready for the track, and will be finished early next summer. Has a land grant of some 2,000,000 of acres to aid in its construction. Is projected to run to Marquette on Lake Superior, 393 miles, with branch to Ontonagon, 60 miles—total 453 miles.

	Earnings, Passengers.	Freight.	Mail & Mis.	Total.
January.....	\$9,514 78	10,685 78	742 09	20,942 65
February.....	8,193 47	9,210 64	633 49	18,037 60
March.....	13,862 78	10,681 41	746 15	25,290 33
April.....	20,009 40	17,132 40	784 55	37,926 35
May.....	15,265 82	24,594 18	802 49	40,662 49
June.....	24,036 55	26,525 79	851 10	51,413 44
July.....	13,214 23	23,674 72	1,147 11	38,036 06
August.....	15,691 08	12,396 85	1,188 12	29,266 03
September.....	19,134 58	17,503 28	1,436 35	38,074 21
October.....	18,856 26	16,700 20	1,369 90	36,926 36
November.....	13,247 11	15,463 67	1,751 13	30,461 91
December.....	10,911 52	10,240 57	1,430 16	22,582 25

Total.....\$182,876 26 194,608 50 12,834 92 390,319 68

Movement of Passengers.

	Thro'.	West.	Way.	W't.	Total.	Th'.	East.	W.E't.	Total.
January.....	1420	2636	4156	1187	2349	2536			
February.....	1196	2056	4151	1177	1735	2012			
March.....	2139	3280	5429	1731	3150	4861			
April.....	3826	3547	7373	1855	3439	5314			
May.....	2063	3003	5066	1384	2283	4257			
June.....	2020	2679	5599	2708	2651	5354			
July.....	2246	2929	5568	1996	3103	5099			
August.....	1463	3554	5016	1319	3693	5162			
September.....	228	2948	6158	1534	4529	6632			
October.....	2389	4184	6573	1963	4779	6241			
November.....	1539	3878	5417	996	4346	5345			
December.....	886	2176	4122	861	3704	4462			

Total.....24,334 39,143 63,477 18,394 40,381 59,775

As an extension of the Fond du Lac, we notice the

MILWAUKEE AND MISSISSIPPI R. R.—John Catlin, *Pres.*; William Tainter, *Sec'y*; C. H. Williams, *Treas.*; William Jervis, *Supt.*, Milwaukee. The trains of the Fond du Lac Road are attached to those on the Milwaukee and Mississippi Road at Janesville, and run directly through to Prairie du Chien on the Mississippi without change of cars. Through tickets by the Lake Shore Road are also sold over this line to all points on the Upper Mississippi. Its length is 192 miles.

	Receipts, Passengers.	Freight.	Mail & Mis.	Total.
January.....	\$15,979 32	25,827 12	1,375 00	43,081 44
February.....	14,156 58	24,534 65	1,265 00	39,956 23
March.....	21,134 39	29,285 33	1,494 66	51,914 38
April.....	33,990 16	49,798 88	1,216 06	85,005 10
May.....	30,419 53	55,110 33	1,216 66	86,746 52
June.....	29,422 61	73,660 19	1,216 66	104,299 46
July.....	29,353 12	68,215 72	1,877 60	99,446 44
August.....	26,617 55	32,641 56	1,877 61	66,137 02
September.....	29,107 73	55,419 04	1,877 61	86,404 38
October.....	34,635 64	55,963 17	1,887 61	92,486 42
November.....	19,780 12	41,710 03	1,880 41	63,350 56
December.....	20,696 58	30,334 23	2,384 41	53,415 22

Total.....\$305,866 83 557,900 20 19,479 89 883,186 02

	Movement of Passengers.	Way.	Total.
January.....	796	10,587	
February.....	744	8,594	
March.....	1,334	12,015	
April.....	2,447	12,656	
May.....	3,465	11,973	
June.....	2,344	12,239	
July.....	2,617	13,069	
August.....	2,550	11,391	
September.....	2,673	12,823	
October.....	2,542	16,782	
November.....	1,990	11,268	
December.....	964	8,752	

Total.....24,829 143,081

GALENA AND CHICAGO UNION R. R.—John B. Turner, *Pres.*; William H. Brown, *Vice Pres.*; W. H. Larabee, *Sec'y*; Henry Tucker, *Treas.*; Philip A. Hall, *Supt.*; Wm. J. McAlpine, *Assistant President and Chief Eng.*, Chicago. Length from Chicago to Freeport, 121 miles. With the Illinois Central it forms a direct line to the Mississippi at Dunleith.

	Receipts, Passengers.	Freight.	Mail & Mis.	Total.
January.....	\$35,255 09	26,765 59	3,328 26	65,348 94
February.....	48,972 25	22,183 34	1,600 30	72,756 89
March.....	61,907 50	37,573 12	4,431 01	103,911 63
April.....	85,575 27	51,557 41	4,260 87	141,393 55
May.....	109,984 68	44,266 76	3,652 43	157,903 87
June.....	100,685 95	41,933 13	4,188 57	146,807 65
July.....	116,897 84	45,124 57	5,262 97	167,285 38
August.....	72,812 23	44,276 76	5,197 17	122,286 16
September.....	110,297 23	46,006 92	5,044 68	161,348 83
October.....	87,674 13	49,339 61	4,748 13	141,761 87
November.....	68,586 68	32,986 36	2,768 79	104,341 83
December.....	50,021 40	30,339 95	6,850 87	87,212 22

Total.....\$1,022,141 69 472,269 13 53,150 45 1,547,561 23

Movement of Passengers.

	Thro'.	West.	Way.	W't.	Total.	Th'.	East.	W.E't.	Total.
January.....	1,045	12,214	13,259	1,627	12,163	13,790			
February.....	874	11,856	11,730	772	9,229	10,057			
March.....	1,645	16,318	17,963	1,685	16,180	17,263			
April.....	2,751	20,650	23,401	1,783	18,770	20,553			
May.....	2,284	18,260	20,544	1,860	17,680	19,540			
June.....	2,212	15,320	17,532	1,860	16,830	17,524			
July.....	2,006	17,200	19,206	1,282	15,119	16,401			
August.....	2,437	16,190	18,127	1,876	14,123	16,490			
September.....	2,491	16,490	19,111	2,630	13,701	16,511			
October.....	2,211	16,750	18,961	2,746	16,448	19,494			
November.....	802	12,192	13,494	1,590	10,659	12,249			
December.....	572	9,938	10,510	726	9,858	10,584			

Total.....21,220 181,516 212,736 20,177 171,600 191,997

The first branch line of the Galena is the FOX RIVER VALLEY R. R.—B. W. Raymond, *Pres.*, Chicago. Runs from Elgin to Wisconsin State line, 34 miles. As an extension, we notice the

WISCONSIN CENTRAL R. R.—John E. Holmes, *Pres.*; Jefferson, Wis.; Edward Barber, *Sec'y*; P. H. Brady, *Treas.*; Frederic J. Starin, *Supt.* and *Chief Engineer*, Whitewater, Wis. Only eight miles from the State line to Geneva of this road is finished. Projected to run thence through the heart of Wisconsin to Stevens' Point. The part finished is run by the Fox River Valley Road. The next Road running North is the

BELOIT BRANCH OF THE GALENA R. R.—The officers are the same as the Galena Road. It connects Belvidere, 78 miles West of Chicago, with Beloit, Wis. Length 20 miles. As an extension, we notice the

BELOIT AND MADISON R. R.—Hon. L. J. Farwell, *Pres.*; A. W. Ernst, *Sec'y*, Madison, Wis.; W. M. Larabee, *Assistant Sec'y*, Chicago. This Road is finished from Beloit to Footville, 17 miles, and will be 47 miles when completed to Madison. It will be extended thence to Portage City, 38 miles, connecting there with the La Crosse Road. The next in order is the

MINERAL POINT R. R.—Luther Beecher, *President*; Thos. S. Allen, *Sec.*; Francis Vivian, *Treas.*; George W. Cobb, *Supt.*, Mineral Point. This Road extends from Warren, on the Illinois Central, 145 miles West of Chicago to Mineral Point. Length 32 miles. It will be extended to the Wisconsin River, making it 56 miles long.

	Receipts, Passengers.	Freight.	Mail & Mis.	Total.
January.....	\$72 30	\$1,097 65	.....	.....
February.....	549 60	807 60	.....	.....
March.....	1,107 63	1,366 72	.....	.....
April.....	992 65	2,304 65	.....	.....
May.....	1,213 60	4,419 34	.....	.....
June.....	1,426 30	6,371 44	.....	.....
July.....	1,814 26	4,205 38	.....	.....
August.....	1,440 00	2,382 15	.....	.....
September.....	1,691 50	4,933 55	.....	.....
October.....	1,043 30	3,731 01	.....	.....
November.....	1,172 45	2,560 23	For the year—	.....
December.....	792 20	2,267 26	1,552 52	.....

Total.....\$14,015 78 37,487 08 1,552 52 53,055 38

	North.			South.		
	Thro'.	Way.	Total.	Thro'.	Way.	Total.
January.....	146 1/2	91	237 1/2	199	65 1/2	264 1/2
February.....	109	59 1/2	168 1/2	132	48 1/2	180 1/2
March.....	212	84 1/2	296 1/2	247 1/2	80	327 1/2
April.....	184	130 1/2	314 1/2	230	90	320
May.....	182 1/2	113	295 1/2	221 1/2	117 1/2	339
June.....	198	119	317	239	146	385
July.....	274	266 1/2	540 1/2	341	355	696
August.....	208	113	321	339	29	368
September.....	225	233	458	324 1/2	179 1/2	503 1/2
October.....	175	152	327	252	127	379
November.....	169	72	241	238	47 1/2	285 1/2
December.....	110	98	208	156	62 1/2	220 1/2

Total.....2,293 1,725 2,019 2,879 1,402 4,281 1/2

The next projected line is the PRAIRIE DU CHIEN AND LA CROSSE R. R.—S. D. Hastings, *Sec'y*; J. M. Levy, *Treas.*, La Crosse. Projected to run from Dunleith to La Crosse on the east bank of the Mississippi, 150 miles. As an extension of the Galena and the Illinois Central, we notice the

DUBUQUE AND PACIFIC R. R.—J. P. Farley, *Pres.*; James M. McKinlay, *Sec'y*; C. H. Booth, *Treas.*; A. H. DeClercq, *Supt.*; B. B. Provost, *Chief Eng.*, Dubuque, Iowa. Road completed 40 miles west of Dubuque. Trains run to Nottingham, 38 miles. Projected to run from Dubuque to Sioux City, 331 miles. Has a land grant of 1,257,000 acres.

	Receipts, Passengers,	Freight.	Mail & Misc.	Total.
January.....	\$2,434 84	\$1,944 21	.....	.....
February.....	2,125 20	1,721 54	.....	.....
March.....	2,581 70	1,716 96	.....	.....
April.....	3,070 43	1,979 91	.....	.....
May.....	3,158 59	2,626 21	.....	.....
June.....	3,223 70	4,881 36	.....	.....
July.....	3,030 47	3,913 71	.....	.....
August.....	2,540 12	2,739 20	200	.....
September.....	2,625 01	2,723 22	200	.....
October.....	2,643 68	2,156 29	200	.....
November.....	2,040 43	1,981 22	200	.....
December, abt.	1,435 08	abt 1,435 00	200	.....

The fourth main trunk road is
GALENA (FULTON) AIR LINE.—Officers the same as the main line. Runs from Chicago to Fulton, on the Mississippi, 136 miles. As an extension of this road, we have the

CHICAGO, IOWA AND NEBRASKA R. R.—Chas. Walker, Chicago, *President*; Geo. W. Bourne, Clinton, Iowa, *Sec'y*; Chas. A. Lombard, Boston, Mass., *Treas.*; M. Smith, Clinton, Iowa, *Supt. and Chief Eng.* This road is completed from Clinton, on the Mississippi, nearly opposite Fulton, to Lisbon, 64 miles. It is to be done to Cedar Rapids, 81 miles, some time in May. Projected to run thence north to St. Paul, Minnesota. Total length 232 miles. Connects at Cedar Rapids with steamboat navigation on Cedar River north some 60 miles.

Receipts.	Passengers.	Freight.	Mail & Mis.	Total.
January....	\$23,15	1,918 50	201 51	2,446 16
February....	664 75	1,540 01	200 70	2,414 46
March.....	1,233 90	1,759 00	199 78	3,192 68
April.....	1,132 40	2,170 34	210 27	3,513 01
May.....	1,570 31	2,499 76	159 69	4,229 76
June.....	1,382 65	5,698 43	401 42	7,482 50
July.....	1,410 40	4,121 48	334 49	5,756 37
August.....	1,591 91	2,379 16	231 63	3,992 70
September..	1,754 77	2,401 39	422 79	4,468 95
October.....	1,520 41	2,383 49	236 59	4,162 49
November..	1,462 74	2,872 42	232 15	4,427 31
December..	1,170 00	3,062 88	254 06	4,486 94
Total....	\$15,379 29	\$32,817 86	\$2,655 08	\$50,852 23

Movement of Passengers.

	Total West.	Total East.
January.....	618	640
February.....	469	439
March.....	905	887
April.....	900	698
May.....	1,115	1,290
June.....	946	911
July.....	1,185	1,157
August.....	957	989
September..	1,133	1,371
October.....	1,051	1,104
November..	818	903
December..	593	586
Total.....	11,250	10,985

Returning to Illinois, as a southern branch of the Galena Air Line, we notice the

STERLING AND ROCK ISLAND R. R.—Miles S. Henry, *Pres.*; Nelson Mason, *Treas.*; David Leavitt, *Chief Eng.*, Sterling. This road projected to run from Sterling to Rock Island, 50 miles, it is in a forward state of construction. We believe it is to be completed some time during the coming summer. The fourth trunk line in our order is the

CHICAGO, BURLINGTON AND QUINCY R. R.—John Van Nortwick, Batavia, Ill., *President*; Amos T. Hall, Secretary and Treasurer; Chas. G. Hammond, Superintendent. Connects Chicago with Burlington, Iowa, 210 miles. It crosses the Rock Island Road at Pond Creek, making it necessary for us to notice its branches before those of the Rock Island, though lying further south in Iowa and Missouri.

Receipts.	Passengers.	Freight.	Mail & Mis.	Total.
January....	\$37,909 48	\$63,165 90	\$2,654 54	\$1,033,729 92
February....	30,393 88	61,571 42	2,678 95	96,644 26
March.....	45,154 43	68,920 56	2,797 82	116,872 81
April.....	52,903 19	74,341 53	2,831 33	130,076 05
May.....	47,273 74	80,516 20	2,863 38	130,653 32
June.....	42,623 49	1,310 62	2,123 66	158,539 87
July.....	44,155 49	95,417 47	3,295 88	142,525 84
August.....	43,185 15	103,079 69	2,646 89	148,921 73
September..	53,328 64	110,157 30	3,163 01	166,648 95
October.....	55,307 40	102,694 54	2,754 53	157,756 47
November..	42,470 55	89,917 71	2,749 71	135,127 97
December..	41,278 91	68,706 82	2,916 71	112,932 45
Total....	\$533,934 75	\$1,313,421 97	\$34,252 92	\$1,000,709 64

Movement of Passengers.

	West.	East.
January.....	Thro'. 490	Thro'. 675
February....	Way. 11,487	Way. 11,778
March.....	Total. 11,929	Total. 12,453
April.....	Thro'. 558	Thro'. 439
May.....	Way. 8,165	Way. 8,196
June.....	Total. 8,723	Total. 8,635
July.....	Thro'. 917	Thro'. 419
August.....	Way. 13,450	Way. 12,464
September..	Total. 14,767	Total. 12,971
October.....	Thro'. 1,624	Thro'. 976
November..	Way. 14,291	Way. 13,140
December..	Total. 15,615	Total. 14,076
Total....	Thro'. 1,325	Thro'. 758
	Way. 12,719	Way. 12,762
	Total. 13,784	Total. 13,120
	Thro'. 944	Thro'. 691
	Way. 11,582	Way. 11,662
	Total. 12,556	Total. 12,333
	Thro'. 762	Thro'. 715
	Way. 13,26	Way. 13,257
	Total. 14,298	Total. 14,923
	Thro'. 732	Thro'. 398
	Way. 12,455	Way. 14,125
	Total. 13,187	Total. 15,013
	Thro'. 1,518	Thro'. 1,012
	Way. 13,657	Way. 14,001
	Total. 15,175	Total. 15,013
	Thro'. 1,301	Thro'. 639
	Way. 15,7	Way. 15,788
	Total. 17,082	Total. 16,017
	Thro'. 825	Thro'. 96
	Way. 1,502	Way. 11,748
	Total. 12,57	Total. 12,674
	Thro'. 597	Thro'. 1,160
	Way. 1,431	Way. 11,662
	Total. 11,5	Total. 12,762
Total....	10,998	149,071
	160,069	9,266
	140,683	156,969

As an extension we notice the
BURLINGTON AND MISSISSIPPI R. R.—Edward L. Baker, Boston, Mass., *President*; J. N. Dinsmore, Boston, Mass., *Treasurer*; J. G. Read, Burlington, Iowa, *Superintendent* and *Vice-President*; H. Thielson, Burlington, Iowa, *Chief Engineer*. Road in operation to Agency City, 70 miles west of Burlington. Will be finished in a short time to Ottumwa, 75 miles west. Projected to run to the Missouri at the mouth of the Platte, 220 miles. Has a land grant from Congress to aid in its construction.

Receipts.	Passengers.	Freight.	Mail & Mis.	Total.
January.....	\$3,330 71	\$2,490 89	\$20 75	\$1,721 26
February....	2,313 15	2,116 29	369 19	4,798 63
March.....	3,576 70	2,957 36	92 62	6,627 18
April.....	4,043 75	3,312 05	25 15	7,380 95
May.....	3,482 20	2,142 05	342 78	5,967 03
June.....	3,314 45	2,456 71	89 86	5,778 02
July.....	3,416 34	2,571 52	5 00	5,992 86
August.....	3,716 22	2,182 49	327 64	7,216 35
September..	5,639 47	5,511 36	91 82	11,242 65
October.....	5,962 04	5,051 68	38 75	11,342 47
November..	4,366 69	6,149 84	24 25	10,530 78
December..	3,646 88	4,957 51	197 27	8,801 62
Total....	\$45,377 52	\$42,869 46	\$1,975 06	\$91,222 10

Movement of Passengers.

	West.	East.
January.....	Thro'. 410	Thro'. 432
February....	Way. 1273	Way. 1259
March.....	Total. 1683	Total. 1691
April.....	Thro'. 305	Thro'. 348
May.....	Way. 1001	Way. 923
June.....	Total. 1306	Total. 1211
July.....	Thro'. 544	Thro'. 405
August.....	Way. 1581	Way. 1451
September..	Total. 2125	Total. 1916
October.....	Thro'. 612	Thro'. 409
November..	Way. 1911	Way. 1394
December..	Total. 2533	Total. 1303
	Thro'. 478	Thro'. 434
	Way. 1629	Way. 1186
	Total. 2167	Total. 1630
	Thro'. 428	Thro'. 404
	Way. 1173	Way. 1258
	Total. 1601	Total. 1440
	Thro'. 479	Thro'. 463
	Way. 1227	Way. 1359
	Total. 1706	Total. 1322
	Thro'. 306	Thro'. 321
	Way. 1124	Way. 1515
	Total. 1731	Total. 1836
	Thro'. 1298	Thro'. 1279
	Way. 1447	Way. 1168
	Total. 2745	Total. 1997
	Thro'. 429	Thro'. 428
	Way. 1279	Way. 1168
	Total. 2108	Total. 1997
	Thro'. 524	Thro'. 652
	Way. 1204	Way. 1368
	Total. 1728	Total. 1920
	Thro'. 390	Thro'. 554
	Way. 1122	Way. 1065
	Total. 1512	Total. 1620
Total....	16,604	16,272
	22,376	6,591
	14,882	21,473

As an Illinois branch of the Chicago, Burlington and Quincy, we notice the

QUINCY AND CHICAGO R. R.—N. Bushnell, Quincy, *Pres't*; C. G. Hammond, *Supt.*; John C. Cox, Quincy, *Sec'y and Treas.* This Road connects with the Burlington line at Galesburg, 168 miles from Chicago, and runs thence to Quincy, on the Mississippi, 100 miles. It is run in close connection with the Chicago, Burlington and Quincy Railroad.

As an extension, we notice the

HANNIBAL AND ST. JOSEPH R. R.—Joshua Gentry, Marion Co., Mo., *Pres't*; John L. Lathrop, Hannibal, Mo., *Sec'y and Treas.*; Josiah Hunt, Hannibal, Mo., *Supt. and Engineer*. This important line has been completed during the present month of February, 1859. It runs from Hannibal, Mo., to St. Joseph, on the Missouri River, 207 miles. The Chicago, Burlington and Quincy Road connects with it by steamer from Quincy, 20 miles. By this line passengers from Chicago will be landed on the Missouri River in twenty-four hours from Chicago, some four or five hundred miles above St. Louis. This line will have a great influence in diverting the trade and travel of the valley of the Missouri, of Kansas and Nebraska, to Chicago. Returning to Chicago, the fifth trunk line is the

CHICAGO AND ROCK ISLAND R. R.—Henry Farnam, *Pres't*; Francis H. Jones, New York, *Sec'y*; E. W. Dunham, New York, *Treas.*; John F. Tracy, *Supt.* This Road connects Chicago with Rock Island, where the only railroad bridge yet thrown over the Mississippi connects it with the Miss. and Missouri Road.

Receipts.	Passengers.	Freight.	Mail & Mis.	Total.
January.....	\$32,915 43	\$6,259 39	\$3,620 84	\$72,045 66
February....	27,254 23	36,432 11	3,620 82	67,307 16
March.....	44,319 88	44,132 98	3,620 84	92,120 44
April.....	45,427 42	43,072 28	3,620 84	92,120 44
May.....	40,553 92	36,484 96	3,558 34	80,594 52
June.....	38,671 43	47,752 84	3,613 32	90,143 64
July.....	35,614 53	42,201 58	3,958 34	82,374 45
August.....	37,687 00	42,139 31	3,553 34	83,374 65
September..	42,413 00	49,013 73	3,558 32	94,985 14
October.....	40,370 84	47,830 62	3,553 34	92,759 30
November..	34,101 38	35,063 34	3,818 12	73,933 04
December..	29,919 62	27,299 13	3,000 00	60,218 80
Total....	\$449,526 02	\$489,152 32	\$43,101 65	\$981,780 00

Movement of Passengers.

	West.	East.
January.....	Thro'. 985	Thro'. 1,048
February....	Way. 8,647	Way. 9,055
March.....	Total. 9,626	Total. 10,113
April.....	Thro'. 1,022	Thro'. 1,324
May.....	Way. 7,146	Way. 7,638
June.....	Total. 8,153	Total. 8,732
July.....	Thro'. 2,067	Thro'. 1,324
August.....	Way. 11,337	Way. 10,824
September..	Total. 13,344	Total. 12,148
October.....	Thro'. 2,937	Thro'. 1,313
November..	Way. 10,908	Way. 9,086
December..	Total. 12,845	Total. 10,706
	Thro'. 2,311	Thro'. 1,551
	Way. 9,991	Way. 9,145
	Total. 12,305	Total. 10,776
	Thro'. 1,917	Thro'. 1,497
	Way. 9,594	Way. 9,166
	Total. 11,311	Total. 10,651
	Thro'. 1,113	Thro'. 1,437
	Way. 10,407	Way. 9,213
	Total. 10,521	Total. 10,651
	Thro'. 1,432	Thro'. 1,370
	Way. 9,476	Way. 9,399
	Total. 10,858	Total. 10,795
	Thro'. 1,958	Thro'. 1,698
	Way. 9,863	Way. 9,027
	Total. 11,822	Total. 10,726
	Thro'. 1,962	Thro'. 1,390
	Way. 9,720	Way. 9,450
	Total. 11,662	Total. 10,641
	Thro'. 1,256	Thro'. 1,420
	Way. 8,785	Way. 8,418
	Total. 10,442	Total. 9,838
	Thro'. 1,205	Thro'. 1,166
	Way. 8,614	Way. 8,103
	Total. 9,919	Total. 9,269
Total....	20,356	112,496
	132,832	16,627
	107,431	124,053

*Estimated.

As an extension, we have the
MISSISSIPPI AND MISSOURI R. R.—Hon John A. Dix, New York, *Pres't*; H. Price, Davenport, *Sec'y*; F. H. True, New York, *Treas.*; John F. Tracy, Chicago, *Supt.* The first division of this Road is to run from Davenport to Council Bluffs, 300 miles—55 miles, to Iowa City, are now completed. The work is progressing west of Iowa City. The second division runs from Muscatine to Oskaloosa, 100 miles, and is finished to Washington, 37 miles. The third division is finished from Muscatine to Wilton, the junction with the main line, 13 miles—is to run to Cedar Rapids, 50 miles. This Road has a land grant of half a million of acres to aid in its construction.

Receipts.	Passengers.	Freight.	Mail.	Total.
January.....	\$6,173 73	\$2,692 31	.....	\$8,866 04
February....	6,070 43	9,042 16	.....	15,112 59
March.....	8,172 38	7,708 23	.....	15,940 60
April.....	9,310 53	10,245 50	.....	19,556 03
May.....	8,631 49	11,336 68	.....	19,968 17
June.....	7,504 04	9,769 96	.....	16,874 00
July.....	7,504 04	9,745 39	.....	16,697 93
August.....	6,475 96	6,215 26	.....	12,691 22
September..	8,918 92	12,058 38	.....	20,973 30
October.....	8,663 50	11,037 05	.....	19,900 55
November..	7,005 79	11,177 93	.....	18,183 02
December..	6,259 79	13,357 61	3,400 00	19,917 40
Total....	\$90,280 02	\$124,162 51	\$3,400 00	\$217,842 53

Movement of Passengers.

	West.	East.
July.....	Thro'. 779	Thro'. 801
August.....	Way. 2,233	Way. 2,358
September..	Total. 3,112	Total. 3,159
October.....	Thro'. 804	Thro'. 760
November..	Way. 2,640	Way. 2,512
December..	Total. 3,414	Total. 3,272
	Thro'. 1,048	Thro'. 1,053
	Way. 2,454	Way. 2,783
	Total. 3,531	Total. 3,836
	Thro'. 1,052	Thro'. 1,015
	Way. 2,318	Way. 2,623
	Total. 3,407	Total. 3,638
	Thro'. 712	Thro'. 762
	Way. 2,110	Way. 2,487
	Total. 2,872	Total. 3,260
	Thro'. 574	Thro'. 695
	Way. 2,249	Way. 2,469
	Total. 3,022	Total. 3,164
Total....	5,660	13,665
	17,665	5,687
	15,233	20,320

As a branch of the Chicago and Rock Island, we notice the

PEORIA AND BUREAU VALLEY R. R.—Hon. N. B. Judd, *Pres*

The distance from Galesburg to Gilman, on the Chicago branch of the Illinois Central Railway, is 143 miles. The road connects with the Peoria and Bureau Valley, Chicago, Alton and St. Louis, and Branch of the Illinois Central Railway for this city.

As an extension of the Bureau Valley we notice the

ILLINOIS RIVER RAILWAY.—R. S. Thomas, Vir., *Pres't*; B. S. Prettyman, Pekin, *Vice Pres't*; M. H. L. Schooley, Vir., *Sec.*; Francis Low, Havana, *Treas.*; J. B. Cummings, Pekin, *Chief Engineer*.

This road extends from Peoria to Jacksonville—83 miles. It connects at Jacksonville with the Jacksonville, Alton and St. Louis Railroad—thus to form, in connection with the Chicago and Rock Island, and the Bureau Valley Railroads, a through line from Chicago to St. Louis.

All the iron, chairs, spikes, switches, &c., are purchased and will be delivered early in the spring, and a running arrangement made with the Chicago and Rock Island Railroad, provides all the motive power, cars, &c., for the operation of the road.

Work progressed steadily during the past year; 54 miles of the road had ready for track between the Junction with the Peoria and Hannibal Railroad, 7½ miles south of Peoria, and Virginia in Cass County, 60 miles. The work in Tasewell, Mason and Cass Counties is progressing rapidly, and the grading will probably be completed to Virginia by July 1st, 1859. The materials for the Illinois River bridge are nearly all delivered, and it is expected to have the track laid from Peoria to Pekin by July 1st, 1859. The whole line from Peoria to Jacksonville is to be in operation by January 1st, 1860. The next trunk line leading from this city is the

CHICAGO, ALTON AND ST. LOUIS RAILROAD.—Hon. Joel A. Matteson, Springfield, *Pres't*; James K. Alexander, Bloomington, *Sec'y*; R. Eaton Goodell, Joliet, *Treas.*; Asa H. Moore, Bloomington, *Supt.*

This road connects Chicago with Alton and St. Louis, 284 miles. It is, therefore, one of our most important lines. We have no report showing the movement of passengers.

Earnings.				
Passengers.	Freight.	Mail & Mis.	Total.	
January....	\$35,662.20	22,071.74	7,950.10	64,983.94
February....	21,608.65	23,887.50	668.97	51,165.12
March.....	34,633.22	35,917.24	899.91	71,450.37
April.....	50,701.27	38,300.52	83.30	89,085.09
May.....	38,760.47	32,408.86	648.40	71,817.73
June.....	35,657.66	30,286.14	23.00	65,966.80
July.....	35,248.59	31,201.42	14,531.64	80,980.65
August.....	30,108.64	59,690.68	25.00	89,824.32
September..	38,111.18	51,173.59	101.00	89,384.64
October.....	39,609.21	39,425.45	150.00	79,214.66
November..	30,911.16	33,982.19	2.10	64,895.35
December..	26,799.11	21,360.71	370.00	48,529.82
Total....	\$417,803.26	424,784.94	\$24,753.32	\$867,288.52

The next great trunk line is the

ILLINOIS CENTRAL RAILWAY.—W. H. Osborn, New York, *Pres't*; W. K. Ackerman, New York, *Sec'y*; J. N. Perkins, New York, *Treas.*; G. B. McClellan, Chicago, *Vice Pres't*, *Supt.* and *Chief Engineer*.

The road extends from Chicago to Cairo at the mouth of the Ohio, and from Centralia, 112 north of Cairo, to Dunleith, on the Upper Mississippi. Total length, 704 miles.

Receipts.				
Passengers.	Freight.	Mail & Mis.	Total.	
January....	\$56,889.27	60,143.10	13,028.62	
February....	49,259.30	53,956.61	13,242.56	
March.....	72,454.47	76,741.02	14,559.22	
April.....	33,195.68	81,773.38	15,011.95	
May.....	70,766.39	76,293.66	14,030.29	
June.....	64,120.09	75,381.43	14,691.14	
July.....	63,607.27	75,644.29	14,077.86	
August.....	65,042.96	120,440.69	17,069.96	
September..	90,780.32	112,911.54	15,580.72	
October.....	76,142.29	94,390.00	10,243.80	
November..	63,490.17	76,943.47	15,608.96	
December..	63,081.25	71,624.28	17,293.20	
Total....	\$519,829.37	975,944.87	130,804.28	1,976,578.52

Movements of Passengers.

	North.	South.	Through.	Way.	Total No.
January....	58,833
February....	50,525
March.....	46,530
April.....	54,905
May.....	49,281
June.....	40,164
July.....	52,486
August.....	47,900
September..	60,462
October.....	50,263
November..	43,320
December..	43,076
Total....	267,263	281,467	101,341	467,329	568,679

LAND DEPARTMENT ILLINOIS CENTRAL RAILROAD Co.—J. W. Foster, *Commissioner*; A. E. Burnside, *Cashier*; P. Daggy, *Sec.*; J. B. Austin, *Registrar*.

The transactions of this department up to the 1st of January, 1859, were as follows:

	Whole grant.	Sold.	On hand.
	Acres.	Acres.	Acres.
Construction Lands.	2,000,000	\$71,448.75	1,123,551.75
Free Lands.....	345,000	195,113.58	149,886.48
Interest Lands....	250,000	162,573.50	87,426.50
Total.....	2,595,000	1,229,835.33	1,365,164.69

The sales in 1858 were—

28,901.55 acres for cash and notes.....	\$307,157.75
Add Town Lot Sales.....	18,530.80
Total.....	\$325,708.55
Add previous sales.....	\$15,311,440.40
Aggregate of all sales to date.....	\$15,637,148.95

BONDS.

Of the Construction Bonds, there have been finally canceled.....	\$927,000.00
Of the Free Land Bonds, there have been finally canceled.....	126,000.00

Making in all..... \$1,050,000.00

These lands, given by Congress to aid in the construction of this road, it should be remembered, are among the finest in the Mississippi Valley. More than one half of them, worth from twelve to fifteen millions dollars, still remain unsold. The long time and easy payments offered by the Company should make them specially attractive to settlers. The first in order of the three great eastern trunk lines is the

PITTSBURGH, FORT WAYNE AND CHICAGO RAILROAD.—J. Edgar Thomson, Philadelphia, *Pres't* and *Chief Engineer*; T. Haskins DuPuy, Pittsburgh, *Acting Pres't*; J. K. Edgerton, Ft. Wayne, Ind., *Vice Pres't*; A. Bradley, Pittsburgh, Pa., *Sec.*; T. D. Messler, Pittsburgh, Pa., *Auditor*; J. P. Henderson, Pittsburgh, Pa., *Treas.*; Jno. J. Houston, Pittsburgh, Pa., *Gen'l F. & P. Agent*; Jno. B. Anderson, Pittsburgh, Pa., *Gen'l Supt.*; J. N. Du Barry, Ft. Wayne, Ind., *Supt. W. D.* D. W. Ross, Chicago, *Gen'l Agent*.

This road was completed to this city Dec. 25th, 1858. It connects at Pittsburgh by the Penn. Central and other roads with all the cities on the Atlantic seaboard. Length 467 miles.

Earnings. Passengers. Freight. Mails, Rents, &c. Total.				
January....	\$48,747.79	\$39,694.74	\$6,093.29	\$94,735.82
February....	40,542.64	47,170.63	10,027.81	97,770.48
March.....	71,230.51	69,317.08	11,321.47	151,873.06
April.....	69,606.31	54,487.57	11,211.46	139,875.34
May.....	61,759.18	43,168.89	10,556.72	115,404.79
June.....	58,634.21	39,216.91	10,669.46	107,920.58
July.....	48,385.55	48,766.76	10,617.56	107,769.87
August.....	61,994.55	76,540.15	11,330.67	149,974.77
September..	81,399.33	81,597.30	11,297.24	174,286.92
October.....	78,664.71	76,724.55	10,189.79	165,579.05
November..	62,850.51	54,453.57	10,189.79	131,528.03
December (est.)	58,630.20	59,266.24	14,226.03	132,112.47
Total....	\$742,372.04	699,053.79	126,354.35	\$1,567,780.18

Movement of Passengers.

	West.			East.		
	Thro.	Local.	Total.	Thro.	Local.	Total.
Jan.....	3,298	12,866	16,164	3,847	13,155	17,002
Feb.....	2,731	9,097	11,828	2,009	9,164	11,064
Mar.....	5,565	13,718	19,283	3,035	13,966	16,301
April.....	5,632	13,563	19,195	2,756	13,017	15,773
May.....	4,519	12,731	17,250	4,057	12,586	16,643
June.....	3,476	13,559	17,035	3,159	13,685	16,844
July.....	3,130	17,116	20,266	3,069	16,924	19,993
August.....	4,320	17,857	22,166	3,637	17,379	21,016
Sept.....	5,652	17,842	23,494	4,382	18,254	22,086
Oct.....	4,322	17,804	22,096	3,781	17,665	21,446
Nov.....	3,580	14,172	17,752	3,269	14,600	17,869
Dec. (est.)	3,400	13,500	16,900	3,100	18,800	16,900
Total....	50,404	173,665	224,069	40,542	173,395	213,937

Next we notice the second great eastern line, the

MICHIGAN SOUTHERN AND NORTHERN INDIANA RAILROAD.—Geo. Bliss, Springfield, Mass., *Pres't*; Wm. Walcott, New York, *Sec. pro tem*; Wm. Walcott, New York, *Treas.*; Jno. D. Toledo, Ohio, *Supt.*

Connects Chicago by Cleveland and Toledo and other eastern roads, directly with all the seaboard cities. Length 242 miles.

Receipts. Passengers. Freight. Mail & Mis. Total.				
January....	\$55,119.28	40,968.90	10,649.60	106,737.18
February....	46,704.02	34,135.14	16,877.63	97,736.81
March.....	81,878.73	61,966.08	16,643.33	160,528.14
April.....	96,497.71	79,686.40	30,091.30	206,275.41
May.....	80,299.18	67,481.64	40,128.94	187,909.76
June.....	79,970.50	68,376.53	21,769.98	180,137.01
July.....	71,019.48	60,968.26	17,618.94	149,606.78
August.....	71,772.66	100,014.72	27,543.31	202,401.73
September..	109,649.43	103,641.32	18,011.13	232,641.88
October.....	97,270.41	94,450.93	19,911.04	211,641.33
November..	77,894.37	73,201.98	22,927.04	174,023.39
December..	57,928.76	64,577.41	16,926.28	139,432.58
Total....	\$920,366.53	849,508.36	269,452.08	2,030,346.97

Movement of Passengers.

	West.			East.		
	Thro.	Way.	Total.	Thro.	Way.	Total.
January....	2,524	11,974	14,198	1,854	12,221	14,075
February....	2,335	8,736	10,972	1,699	8,276	9,946
March.....	5,257	14,751	20,008	2,303	12,737	15,130
April.....	7,847	15,335	23,433	2,555	12,103	14,629
May.....	6,272	12,264	18,541	2,688	11,311	14,001
June.....	4,333	13,088	17,421	3,066	14,057	17,194
July.....	3,885	13,844	17,689	2,575	14,940	17,515
August.....	3,501	13,358	16,851	2,988	14,614	17,599
September..	4,645	15,568	20,213	3,918	13,269	20,207
October.....	5,139	15,870	20,509	2,552	15,525	19,177
November..	3,288	13,736	16,614	3,423	14,419	17,832
December..	2,134	12,381	14,516	2,654	12,342	14,996
Total....	50,763	150,962	219,725	33,300	158,504	192,804

The latter table shows that the number of through passengers is greater West than East, in all the months of the year, except November and December.

As a branch of the Michigan Southern and Northern Indiana, we notice the

Lastly, we notice in our order the third great Eastern line, the

MICHIGAN CENTRAL RAILWAY.—John W. Brooks, President; W. B. Fowle, Boston, *Sec'y*; Isaac Livermore, Boston, *Treasurer*; R. M. Rice, Detroit, *Superintendent*; John M. Berrien, Detroit, *Engineer*.

Connects Chicago with Detroit, 282 miles. Thence by the Canada Great Western, the Grand Trunk, the New York Central and other roads, with all the Atlantic cities.

Receipts. Passengers. Freight. Mail & Mis. Total.				
January....	\$53,611.30	62,755.99	6,019.66	122,377.95
February....	45,215.06	56,485.76	5,801.60	107,502.40
March.....	81,898.52	77,933.41	6,106.10	165,938.03
April.....	114,773.79	102,236.81	5,999.77	223,010.37
May.....	90,015.19	80,709.94	6,001.88	176,727.01
June.....	92,249.56	65,596.14	6,001.88	170,847.58
July.....	82,488.20	55,233.77	5,150.48	148,872.45
August.....	99,669.99	81,001.19	5,988.74	176,660.92
September..	113,326.67	105,459.95	6,001.88	224,787.50
October.....	103,632.29	100,262.65	6,001.88	199,896.83
November..	73,111.37	77,184.75	6,001.88	156,298.00
December..	57,934.30	60,863.53	5,291.88	124,089.71
Total....	\$1,013,662.24	931,752.98	71,370.63	2,016,185.85

Movement of Passengers.

	West.			East.		
	Thro.	Way.	Total.	Thro.	Way.	Total.
January.....	2,140	9,423	11,503	1,952	8,697	10,649
February.....	1,967	7,324	9,311	1,661	6,347	8,008
March.....	4,083	12,457	16,720	2,661	9,891	12,309
April.....	9,231	12,261	21,492	2,461	9,756	11,317
May.....	7,378	10,135	17,513	3,276	9,84	13,310
June.....	6,085	10,875	16,920	4,701	10,840	15,542
July.....	4,362	12,837	17,140	4,275	14,072	18,297
August.....	4,620	11,462	16,082	4,845	11,624	16,669
September..	6,342	12,705	19,047	5,134	13,265	18,399
October.....	6,029	15,410	21,439	5,584	15,330	19,994
November..	3,892	10,845	14,701	3,730	11,515	15,246
December..	2,227	9,697	11,924	2,813	9,958	12,771

Central by this line directly through to Cincinnati.

The following list embraces the roads completed, in process of construction, or projected, with their different branch and extension lines, centering in Chicago. Where roads extend beyond Illinois, they are in most cases traced only through a single State beyond our own. The trunk lines are set on the left of the column; the branch and extension lines are indented:

	Miles.
Chicago and Milwaukee.....	85
Kenosha and Rockford.....	80
Racine & Mississippi.....	150
La Crosse & Milwaukee, to St. Paul, about.....	375
Hudson and Superior.....	150
Branch to Byfield.....	80
Chicago, St. Paul and Fond du Lac—Chicago to Marquette and Ontonagon, on Lake Superior.....	443
Milwaukee and Mississippi.....	192
Galena and Chicago Union.....	121
Fox River Valley.....	34
Wisconsin Central.....	150
Beloit Branch.....	20
Beloit and Madison.....	85
Mineral Point.....	56
Prairie du Chien and La Crosse.....	150
Dubuque and Pacific.....	331
Galena (Fulton) Air Line.....	126
Chicago, Iowa and Nebraska to St. Paul.....	232
Line with the Iowa Central to the Missouri.....	350
Sterling and Rock Island.....	50
Chicago, Burlington and Quincy.....	210
Burlington and Missouri.....	220
Quincy and Chicago.....	100
Hannibal and St. Joseph.....	207
Chicago & Rock Island.....	182
Mississippi and Missouri, 1st Division.....	300
“ “ 2d “.....	100
“ “ 3d “.....	50
Peoria and Bureau Valley.....	47
Peoria and Hannibal.....	130
Peoria and Oquawka.....	143
Illinois River.....	83
Chicago, Alton and St. Louis.....	284
Illinois Central.....	704
Pittsburg, Fort Wayne and Chicago.....	467
Michigan Southern and Northern Indiana.....	242
Monroe Branch.....	30
Cincinnati, Peru and Chicago.....	70
Michigan Central.....	282
New Albany and Salem.....	284
Total—11 trunk and 29 branch and extension lines.....	7,415

The following list embraces the trunk roads actually completed and in operation, with their branch and extension lines, centering in Chicago:

	Miles.
Chicago and Milwaukee.....	85
Kenosha and Rockford.....	80
Racine and Mississippi.....	150
La Crosse and Milwaukee.....	375
Chicago, St. Paul and Fond du Lac.....	443
Milwaukee and Mississippi.....	192
Galena and Chicago Union.....	121
Fox River Valley.....	34
Wisconsin Central.....	150
Beloit Branch.....	20
Beloit and Madison.....	85
Mineral Point.....	56
Dubuque and Pacific.....	331
Galena (Fulton) Air Line.....	126
Chicago, Iowa and Nebraska.....	232
Chicago, Burlington and Quincy.....	210
Burlington and Missouri.....	220
Quincy and Chicago.....	100
Hannibal and St. Joseph.....	207
Chicago & Rock Island.....	182
Mississippi and Missouri, 1st Division.....	300
“ “ 2d “.....	100
“ “ 3d “.....	50
Peoria and Bureau Valley.....	47
Peoria and Oquawka.....	143
Chicago, Alton & St. Louis.....	284
Illinois Central.....	704
Pittsburg, Fort Wayne and Chicago.....	467
Michigan Southern and Northern Indiana.....	242
Monroe Branch.....	30
Cincinnati, Peru and Chicago.....	70
Michigan Central.....	282
New Albany and Salem.....	284
11 trunk and 20 branch and extension lines.....	4,569

The latter table shows an addition, in spite of “the hard times” during the past year, of 516 miles of railway to those previously completed that have Chicago for their business centre. The Hannibal and St. Joseph road, and those in Iowa and Wisconsin, constitute in the main the additions that have been made. The total number to miles of railway in the State of Illinois is now completed and

in operation does not vary much from TWO THOUSAND SEVEN HUNDRED AND SEVENTY-FIVE MILES. In 1850 there were but 95 miles of railway completed in the entire State. Such a result is equally gratifying and suggestive to all who study the progress of Western development. The number of trains that arrive in and depart from the city daily is about one hundred and ten.

The following Table shows the earnings of all the Railways centering in Chicago, for the year 1858.

TOTAL EARNINGS.				
Passengers.	Freight.	Mail & Mfg.	Total.	
C. & Mil.....	\$145,355 84	46,363 40	12,235 81	204,165 15
Rac. & Miss.....	41,151 20	14,077 85		155,229 05
Mil. & La C.....	203,745 19	29,941 16	16,767 45	492,453 80
C.S.P. & F.L.....	112,876 26	194,668 50	12,344 92	500,319 68
Mil. & Wis.....	305,805 93	557,900 20	19,749 89	883,186 02
Gal. & U.E.....	1,022,141 65	472,269 13	53,150 43	1,548,561 23
Min. Point.....	14,015 78	37,487 05	1,532 52	53,055 38
C. La & Neb.....	15,379 29	32,817 66	1,655 08	50,854 24
Ch. B. & Qu.....	533,334 75	103,441 97	34,252 92	1,669,709 63
Dubuque & P.....	30,919 17	29,468 53	1,280 00	61,578 00
Bur. & Missou.....	46,377 58	42,769 46	1,975 16	91,222 10
Ch. & Rock I.....	419,526 02	439,182 32	43,101 66	981,780 00
Miss. & Mo.....	96,280 02	124,162 51	3,401 00	712,842 53
C. A. & St. L.....	417,800 26	424,734 84	24,751 32	867,288 52
Ill. Central.....	819,829 86	975,904 87	180,804 28	1,976,538 92
P. Ft. W. & C.....	742,372 04	699,053 19	126,354 12	1,567,780 18
M. S. & N. I.....	90,366 63	849,528 36	269,452 08	2,139,346 97
Mich. Cent.....	1,013,062 24	931,732 98	71,370 63	2,016,165 35
Total.....	\$1,517,155 85			

The total is much below the aggregate earnings of the previous year; but when it is remembered that, seven years ago, Chicago had but forty miles of railway, the earnings of which could not have been over \$40,000, the above result ought to be sufficiently satisfactory. In order to show the precise effect of the stagnation in trade upon the traffic of our railways, we append the following table, showing the earnings of the ten trunk roads leading into the city, for the last three years:

Earnings.	1856.	1857.	1858.
C. & M.....	\$50,000 00	\$52,731 92	\$204,165 15
C. St. P. & F.....	137,303 67	429,305 59	290,319 68
G. & C. U.....	2,456,045 70	2,117,904 97	1,547,561 23
C. B. & Q.....	1,627,029 61	1,899,566 49	1,600,709 64
C. & R. I.....	1,751,740 60	1,881,101 57	931,780 00
C. A. & St. L.....	1,000,000 00	998,369 48	867,288 52
Ill. C.....	2,469,533 67	2,293,964 57	1,976,538 92
P., Ft. W. & C.....	1,474,428 76	1,652,727 95	1,567,780 18
M. S. & N. I.....	3,114,756 06	2,186,124 97	2,039,346 97
Mich. Cen.....	3,128,184 10	2,656,471 36	2,015,185 85
Total.....	\$17,812,956 27	\$16,428,228 66	\$13,191,736 74

The table shows a falling off in receipts in these ten lines of \$1,384,727 61 in 1857 from those of 1856, and \$3,236,491 92 in 1858 from those of 1857. The total decrease between the years 1856 and 1858 is \$4,621,219 51. These figures show a per centage of decrease, which explains in some measure the cause of the low price of railway stocks; but in every well managed road the expenses have in most cases been reduced in a corresponding ratio, so that the actual value of Western railway stocks should not be estimated by the falling off in their receipts during the past year. With fair crops and ordinary prosperity, we expect to record a very considerable increase in the traffic of our railways at the close of the year 1859.

MOVEMENT OF PASSENGERS.—Our tables showing the movement of passengers, indicating that the tide of emigration is steadily westward, though for the past year it has been checked largely by the general stagnation of all kinds of business. The following table shows the passenger movement on the three great eastern lines leading into this city.

	Thro.	West.	Way.	Total.	Thro.	East.	Way.	Total.
P. Ft. W. & C.....	50,404	173,665	224,069	40,542	173,395	213,397		
M. S. & N. I.....	54,763	159,962	210,725	33,399	158,804	192,231		
Mich. Cent.....	58,810	135,005	193,815	43,475	130,629	174,104		
Total.....	159,977	468,632	628,609	117,416	462,828	580,244		

The table shows that among the through passengers of these three roads, 42,516 came to this city more than returned by them, and the total excess of the western over the eastern

movement amounts to 48,365. It is to be regretted that the Chicago and Milwaukee, and the Chicago, Alton and St. Louis roads, did not furnish their figures for passengers in the form to enable us to use them in showing the passenger traffic West of the city. The figures for four of the lines are as follows:

	Thro.	West.	Way.	Total.	Thro.	East.	Way.	Total.
C. St. P. & F.....	24,334	29,143	63,467	18,294	40,361	58,775		
G. & C. U.....	21,220	181,516	292,736	20,177	171,901	191,997		
Ch. B. & Q.....	10,998	149,071	160,069	9,286	149,683	143,269		
Ch. & R. I.....	30,356	112,498	132,852	16,627	107,431	124,058		
Total.....	76,908	482,226	559,134	64,484	469,295	533,799		

From these figures it appears that these four roads took West from this city, 12,424 through passengers more than they returned. A comparison of the total movement of through passengers for the past three years gives the following results:

	1856.	1857.	1858.
M. S. & N. I.....	111,662	64,187	105,370
Mich. Cent.....	117,662	64,187	108,990
Total.....	229,324	128,374	214,360

Movement of Passengers on four Roads running west from Chicago.

	1856.	1857.	1858.
C. St. P. & F.L.....	2,217	2,530	43,518
G. & C. U.....	72,707	42,552	57,786
C. B. & Q.....	31,433	25,492	16,691
C. & R. I.....	46,978	30,439	31,784
Total.....	155,335	101,013	149,179

These tables reveal a steady and large decrease in the passenger traffic for the past three years. Yet the total number who came to this city last year on the three great Eastern lines, above those who returned, was 42,516; while the number who went west more than returned from the city, by four lines, was 12,424. The latter number, however, would form a pretty respectable city. There can now be no doubt that within the next few months there will be a large emigration to the new gold fields at the head waters of the Platte, and we shall be much surprised if the statistics of the passenger traffic for the present year do not approach, if indeed they do not equal those of 1856.

PENNSYLVANIA RAILROAD CO.

We have before us the Twelfth Annual Report of the President of this Company, from which we learn that there has been received from the Shareholders, in payment for the capital stock of the Company, up to—

January 1, 1859.....	\$13,240,225 00
And from loans, Mortgages on Real Estate, etc.....	9,171,053 83
Balance of Interest and Dividends due to Stockholders and State Tax on Coupons and Dividends unpaid.....	83,904 45
Balance remaining to credit of contingent fund.....	128,553 58
Amount of Bonds due the State of Pennsylvania for purchase Main Line of public works.....	7,400,000 00
Balance to credit of profit and loss, after charging to this account the original subscription for the Marietta and Cincinnati R. R. (\$50,000), and to the Springfield, Mt. Vernon and Pittsburg R. R. (\$100,000), and to the Income bonds received as interest from the Marietta and Cincinnati R. R. Co. (\$97,500); also, discount upon Company's dollar bonds (\$224,484 95), and sundry other items (\$11,000), the whole amounting to \$1,184,984 95.....	135,050 31
Total.....	\$30,166,967 17

Which has been expended as follows:

Cost of Road, Engineering, land damages, fencing, machine shops, engine houses, station and ware-houses, car sheds, water stations, foreman's and tool houses, and shop machinery, from Harrisburg to Pittsburg.....	\$16,443,135 39
Less profits of Road, after paying interest to Stockholders up to November 1, 1855, credited to cost of Construction, as required by the Charter.....	569,185 79
	\$15,853,949 60

Cost of Main Line of Public Works purchased from State of Pennsylvania.....	7,500,000 00
Cost of Equipment of Road, including locomotives, freight, road and passenger cars.....	2,828,329 27
Cost of Real Estate of the Company.....	1,540,381 65
Cost of telegraph line.....	43,264 28
Extension of Pennsylvania R. R. to Steubenville and Pittsburgh R. R.....	4,547 72
Total cost of Roads and Canals belonging to the Company.....	\$27,772,671 92
Amount of Stock of the Pittsburg, Fort Wayne and Chicago R. R. Co.....	916,050 00
Amount of Bonds of municipal and railroad corporations.....	50,752 50
Amount of bills and accounts receivable.....	790,346 51
Balance in hands of agents.....	206,992 37
Balance in hands of Treasurer, December 31, 1858.....	531,973 87
Total.....	\$30,168,987 17
Receipts from the business of the road for 1858.....	\$5,114,925 34
Receipts from the business of the Canals for 1858.....	181,541 88
Total.....	\$5,296,467 22
Amount of transportation expenses, tolls paid other roads, interest, insurance, general office expenses, tonnage tax, tax on capital stock, and taxes on real estate, sale of uncurrent funds, etc.....	\$3,519,119 24
Expenses of Canals, ordinary and extraordinary.....	129,743 84
Dividends paid to the Stockholders.....	75,383 00
Interest on Bonds, etc.....	593,457 85
Surplus profit of Road and Canals for the year 1858, after payment of interest, dividends and other items, as above.....	338,963 07
Total.....	\$5,296,467 22
The earnings of the Railroad for the year 1858, were.....	\$5,185,330 68
The total expenses were as follows:	
Motive power department.....	\$915,278 05
Conducting transportation, including tolls paid the Harrisburg & Lancaster, and Northern Central R. R. Companies, State taxes, and duty on tonnage to the Commonwealth.....	1,280,798 38
Maintenance of Way Department.....	560,278 16
Maintenance of Car Department.....	192,377 60
General Expenses.....	72,152 87
	3,021,885 04
Leaving net earnings.....	\$2,163,445 64

In their last Annual Report, the Board intimated that the dividend withheld in November, 1857, might be distributed to the shareholders at some period during the year. Since that time, however, the actual condition of the railroad companies in which this company had, under your instructions, become interested, has been more fully developed, and, in consequence of the unfavorable character of their statements, the Board has deemed it more conducive to the permanent interest of this company that its capital should be preserved free from all financial sacrifices, and have, therefore, charged the amount of the original subscription to the Marietta and Cincinnati Railroad, and the Income Bonds received as interest from that company, together with the subscription originally made to the Springfield, Mt. Vernon and Pittsburg Railroad Company, with some other items, to the profit and loss account.

The other roads aided by this company are the Pittsburg, Fort Wayne and Chicago, and the Steubenville and Indiana Railroad Companies. The business of neither of these companies yields a direct return for the amount invested in them, yet the increased traffic drawn to the Pennsylvania Railroad by the connections thus formed with the north-west and the south-west, has afforded a fair equivalent for the outlay, while it has at the same time secured great commercial advantages to the city. We do not apprehend any material loss other than the interest for a few years, upon the investments in these enterprises. The additional assistance given by this company to the Pittsburg, Fort Wayne and Chicago Railroad Company during the past year, has enabled it to

extend its road from Plymouth into the city of Chicago, a distance of eighty-two miles. This aid consisted mainly of iron rails removed from the Portage Railroad, purchased by this company from the commonwealth, and no longer used by it in consequence of its occupying practically the same ground with the Pennsylvania Railroad across the Allegheny Mountain. The whole amount of cash expended for removing rails from the Portage road, and for new rails, spikes and chairs amounted to \$239,075 21.

For this advance, and the value of the iron furnished from the Portage road, the Pennsylvania Railroad Company is amply secured by a pledge of \$650,000 of the first mortgage bonds of the Pittsburg, Fort Wayne and Chicago Railroad Company, together with a general oversight of that work until this advance is returned.

The total number of persons who passed upon the road during the year was 1,012,803 first class passengers and 16,822 emigrants.

The earnings of the road from passengers for 1858 show a decrease from the previous year of \$75,213 for first class, and of \$7,073 for emigrants; a total decrease of \$82,286. The falling off in the passenger travel is probably not greater than will be observed on most of the railroads of the Union, and is doubtless due to the general prostration of the active business of the country. When it is considered that the number of emigrants that arrived at our ports in 1858 was less than half the number received in 1857, the per centage of diminution in this branch of our business will be deemed small.

The gross earnings for freight transported during the year were \$3,536,206 31, of which sum \$3,260,727 49 was for freight carried in the cars of the company, and \$275,478 82 for tolls and motive power in cars of individuals.

Measures are now in progress which give reasonable assurance of the completion of the Pittsburg and Steubenville Railroad within the next year. By this route we can secure a line twenty-four miles shorter than the present route to all of the south-west.

The rolling stock upon the road has been equal to the demands of trade during the past year, and consist of the following, to-wit:

219	passenger and freight locomotives.
56	eight-wheeled wide passenger cars.
12	do. narrow passenger cars.
31	do. emigrant cars.
27	do. baggage cars.
8	do. express cars.
1370	do. house freight cars.
188	do. stock cars.
213	do. platform cars for coal and lumber.
22	do. do. wood.
169	four-wheeled house freight cars.
101	do. coal cars.
99	do. gravel cars.
252	do. road and hand cars.

SALE OF LOUISVILLE AND NASHVILLE RAILROAD BONDS.—Two of our wealthy and enterprising merchants purchased on yesterday, \$100,000 of the bonds of the Louisville and Nashville Railroad. We are pleased to record such evidences of wealth and enterprise among our citizens. At this rate, all the bonds of this company will soon be sold right at home, without the aid of Europe or New York. So much for having such a financier as the Hon. James Guthrie connected with so grand an enterprise as the Louisville and Nashville Railroad. Without him, the enterprise could not have gone on, but with him all things are right. He will make the road, certain. He now sees his way clear, and soon the fact will be announced to the great joy of thousands upon thousands of people.—*Louis. Courier.*

READING RAILROAD.

To the Editor of the New York Tribune.

SIR: The competition in the Anthracite Coal trade for 1859 opens by a reduction of the canal tolls on Lehigh coal of 17 cents per tun, or about twenty per cent. In 1858, the quantity of Lehigh coal produced exceeded the—

Production of 1857.....	61,489 tons.
During the same period the product of the Schuylkill region decreased.....	119,092 "
The Reading Road having lost.....	166,907 "
The Schuylkill Canal having gained.....	47,815 "

It thus appears that on the basis of tolls established by these Companies in 1858, the Lehigh region was the strongest in the competition; the Reading Company being the weakest.

Under such circumstances, the question naturally presents itself—What will be the effect of this reduction of tolls, from the Lehigh district on the Schuylkill coal carriers, and especially on the Reading Company, whose tunnage has steadily and regularly diminished from 2,213,292 tons in 1855, to 1,542,645 tons in 1858, notwithstanding the average charges for transporting coal have been reduced from \$1 65 in 1855 to \$1 20.94 in 1858?

The reduction of the tolls on Lehigh coal must cause a similar reduction in the tolls on the Schuylkill coal, or it will insure the working of the Lehigh mines to their utmost capacity, as the above statements show that even with the established tolls of 1858 the Lehigh region increases, while the Schuylkill diminishes.

It is apparent, therefore, that to retain a due proportion of the trade, the Schuylkill carriers of coal must make at least a corresponding reduction.

The results on the business of the Reading Road are stated so plainly in their recent report, that it is most easy to estimate, and, in fact, to arrive with great accuracy, at the result to be produced by any change in the tolls, or to approximate very closely to the result of a year's business at any fixed rate for transportation. The transportation expenses, etc., for 1858, are stated at \$1,081,802; or

On coal transported.....	\$768,397
On merchandise.....	178,627
On passengers.....	134,478

Total.....\$1,081,802

which the report states is equal to 49.81 cents per tun of coal.

The rent of cars, allowances, etc., were.....\$117,995

Renewal Fund.....182,922

Total.....\$300,917

These allowances and the renewal fund are almost exclusively applicable to the coal business, which, on a tunnage of 1,542,645 tons, are equal to 19½ cents per tun, which added to 49 81.100 cents makes the cost of transporting coal, say 70 cents per tun. The freight and tolls were \$1 20, which leaves a profit of fifty cents per tun.

Therefore, in 1858, a coal tunnage of 1,542,645 tons produced a profit, at 50 cents per tun, of \$771,322. To procure the same profit at a reduced charge of 17 cents per tun, or at a profit of 33 cents per tun, would require 2,337,340 tons, or an increase of 794,695 tons more than the business of 1858, which largely exceeds any estimate of increased production for this year from all the districts.

We are well informed, too, that all the Companies whose works lead directly to this city, are preparing for a much larger business than heretofore. But if we assume that if the Reading Company, by making the reduction that the Lehigh works have done, even increases its tunnage to 1,800,000 tons, the profits on coal (at 33 cents per tun) will be only \$594,000, or \$177,322 less than in 1858, when

the surplus for the common stockholders was but \$111,313, or if we assume that no reduction of tolls is made by the Reading Company, and that other districts meet the offered competition of the Lehigh, then it is proper to estimate that the tannage of the Reading Company will fall in the same proportion as we have estimated the increase, in case of reduction, say 250,000 tons, or to 1,300,000 tons, which, at the same profit per ton as last year, would produce \$650,000, \$121,322 less than last year, or an increase of \$15,009 to the present large floating debt. We have recently heard many complaints of the present management of the Reading Company, which is usual when dividends cease, but reflection and a fair examination of the subject shows, that unless they can control the action of other companies engaged in the same business, they are powerless to protect any interest of stockholders. There may be some increase in the business of passengers, etc., but this can not be material to a capital of \$24,000,000.

With such prospects and results, will the holders of the bonds due next year, which are secured by six different mortgages, and which take priority according to their date, exchange them for bonds issued under the seventh mortgage? All experience answers the question in the negative.

The consequences, we need not predict; they are self-evident. INVESTIGATOR.

DEL., LACKAWANNA AND WESTERN RAILROAD.

From the Annual Report of the Delaware, Lackawanna and Western Road, made to the Stockholders on the 25th of January last, we gather the following facts:

TRANSPORTATION DEPARTMENT.

The gross income from this department was as follows:

From Transportation of Coal	\$1,032,999 39
From Transportation of Merchandise	249 416 16
From Transportation of Express Freight	4,417 49
From Transportation of Mails	9,806 00
From Transportation of Passengers	115,116 46
From Transportation of Extra Baggage	281 92
From Storage	80 39
From Telegraph	569 73
From Rents	1,663 80
From Use of Locomotives	3,115 01
From Use of Cars	8,075 82
Total	\$1,400,511 96
The aggregate expenses, were	418,902 29

Net Earnings from Trans'n Department.. \$881,609 67

The net earnings for 1857 were \$674,498 78; from which, however, for the purpose of a just comparison, the sum of \$75,000 should be deducted. The aggregate expenses for the past year include not less than \$66,000 of expenditure which has heretofore been considered as legitimately chargeable to Construction Account. The track and bridges for the whole distance from Great Bend to the Junction, as well as the equipment, are stated to be now in a better condition than at the close of any preceding year, and from present indications no extraordinary expenditures will be required during the present year. 100,000 to 120,000 tons more of coal could have been easily moved without any increase of equipment, if sale had been made of it.

COAL DEPARTMENT.

The amount received from Coal in 1857, was	\$1,941,121 60
The amount received for Rents in 1857 was	3,152 76
The value of Coal on hand December 31, 1853, was	214 686 43
	\$2,161,960 79
The aggregate expenses were	\$2,071,792 11
The value of coal on hand Dec. 31, 1857, was	179,720 77
	\$2,251,512 88
Loss on Coal Department	\$49,552 09

The General Agent remarks in his Report to the Board, that all the mines are now in good working condition, and capable of yielding an increased quantity of coal, if required. Scarcely any of them have been worked to their full capacity.

The amount of coal on hand December 1, 1857, was—tuns..... 43,290 10
The amount forwarded to Market in 1859, was as follows:

Mined by the Company—tuns.....331,794 01
Purchased from other parties—tuns.....350,270 06
681,664 07

Total tuns.....724,954 17
The aggregate sales in 1858, amounted to.....651,437 06

Quantity on hand Dec. 31, 1858—tuns..... 73,517 11

The foregoing statement, and following tables, are all calculated in net tuns.

The income account stands as follows:

Cr.	
The balance to credit of this account, Dec. 31, 1857, was	\$212,881 87
The net revenue from trans. dep. in 1858, was	\$881,609 67
The amt. received for int. on stock and bonds of Warren & Lack. & Bloomsburg Railroad Co.'s	18,720 10
Amt. rec'd from other sources	4,990 57
Total	\$905,320 36

Dr.	
To one year's int. on \$900,000 bonds of 1871	\$63,000 00
To one year's interest on \$1,500,000 bonds of 75	105,000 00
To one year's interest on \$2,583,500 bonds of 74	180,845 00
To int. on income bonds	70,932 01
To rent of Warren R. R.	89,583 94
To rent of Cay. & Sus. R.	54,600 00
To balance of gen. int. account	26,187 10
To insurances and losses	13,138 38
To bal. against coal dep.	49,552 09
	652,838 52

Net revenue for 1858.....\$252,481 84
To appropriation to renewal fund.. 100,000 00
152,481 84

Balance to credit of income account.....\$371,363 71

It will be observed that one hundred thousand has been appropriated to the Renewal Fund, for depreciation of the road and equipment.

CONSTRUCTION EXPENDITURES.

The cost of the Railroad and Equipment to Dec. 31, 1857.....\$8,762,488 41
Expenditure in 1858..... 71,901 47

Total cost of Road and Equipment.....\$8,834,399 88
Less amount received from Iron, Land, etc., sold, heretofore charged to Northern Division..... 2,692 54

Balance of construction account.....\$8,331,707 34

The construction expenditures for the past year have been only such as were imperatively demanded by the requirements of the business, and a few incurred in settlement of previously existing contracts.

The Company own seventy-one locomotives, seventeen passenger cars, and 3,366 freight cars, etc.

WARREN RAILROAD.—CONSTRUCTION.

The cost of the road to Dec. 31, 1857, was.....\$1,501,508 96
The expenditures in 1858 amounted to..... 40,259 79

Total cost to Dec. 31, 1858.....\$1,541,768 65

For the payments made on this account, this Company received an equal amount of Warren Railroad Stock.

The total cost of coal lands belonging to the Company, is \$154,008 19. The amount of the Renewal Fund, is \$233,526 90; of the Coal Department Fund, \$33,283 45; of the Cayuga Division Fund, \$43,334 24; and of the Sinking Fund, \$49,372 48; with which \$69,930 of the Company's Bonds have been purchased. This investment exceeds the amount set apart for the purpose, (\$30,000,) but it has been increased on account of the low rate at which the Bonds could be obtained.

GENERAL ACCOUNT.

Debtor.

To Construction and Equipment Accounts	\$8,831,707 34
Cost of Coal Lands and Mining Improvements	454,008 19
Cost of Materials on hand	142,276 57
Value of Coal on hand	214,686 43
Stock of Warren Railroad Co.	310,450 00
Stock of Lackawanna and Bloomsburg Railroad Company	132,450 00
Bonds of ditto, ditto, (\$50,000), cost	40,000 00
Bonds of Warren Railroad Co.	22,100 00
Bills and Accounts receivable	452,485 43
Cash on hand	83,627 15
Coupons funded, maturing in 1859	167,195 00
Cost of Coal yards	2,784 29
Cost of vessel property in New York	42,653 66
Advanced on Account of Coal Department for 1858	22,707 64
Suspense Account	55,549 40
Sinking Fund	49,372 48
Total	\$11,064,413 94

Creditor.

By Capital Stock paid in full	\$3,360,250 00
Scrip Stock	622 50
Mortgage Bonds of 1871	900,000 00
Eastern Extension Bonds of 1875	1,500,000 00
Con. Mortgage Bonds of 1881	\$2,600,000 00
Less amount not issued	16,500 00
	2,583,500 00
Income Convertible Bonds of 1867	714,500 00
Income Convertible Bonds of 1865	29,000 00
Income Convertible Bonds of 1862	460,810 00
Interest accrued on Bonds to Dec. 31, 1858	167,228 06
Interest accrued on Stock to Dec. 31, 1858	4,377 64
Interest accrued on Stock and Bonds of the Warren Railroad, Dec. 31, 1858	31,317 20
Bills and Accounts Payable	523,796 13
Renewal Fund	233,526 60
Coal Department Fund	33,283 45
Cayuga Division Fund	53,334 24
Income Account	371,763 71
Certificates for Income Con. Bonds of 1867	25,116 18
Certificates for Income Con. Bonds of 1862	18,905 00
Fractional Certificates of Warren Railroad Stock	3,482 75
Total	\$11,064,413 49

ILLINOIS CENTRAL RAILROAD.

MR. EDITOR:—Having read in your Journal of Saturday last the highly important articles on the subject of the Illinois Central Railroad, and more particularly the one containing "the resolutions intended to be proposed," and which were circulated among a select few," would you allow me space to say a few words on this subject, which your valuable Journal is the only one to notice.

This "confidential" paper once again revives the question of the whole of the amount unpaid on the shares being at some time required; a point which has more than once been urged on the remembrance of the Shareholders in various articles on the Illinois Railroad. Now, why was not this paper communicated to the last meeting of Shareholders as a proposition coming from New York, and a fair and open discussion of the question entered into? Allusion was more than once made at this meeting to the "poorer and weaker Shareholders," falling a sacrifice to "the richer and stronger" Shareholders; but would not the expression of "large and weak" Shareholders have been much more appropriate? Now, is not this the true difficulty, and the true reason why a return to the original policy of the company is recommended? And why was the policy which has been so nearly fatal to the concern originally recommended? And why was the large floating debt contracted? Simply that large numbers of the shares might be held with a trifling investment of capital, and speculation in them rendered as small a risk as possible; and it is this very class of large weak Shareholders who thus propose to overcome the difficulty of meeting the calls on their shares (not being allowed to give bills for them, as Directors are in New York) by creating a fresh loan or floating debt at heavy interest, and selling lands at any sacrifice, to provide money which ought to be met by calls on their

shares. Now, with the same breadt that these encumbrances and these sales are so urgently recommended to be pressed on, even to the selling of every acre of land they could disengage from mortgage, we are told of the immensity of our estates, and of their value were they situated in Scotland. Now, as we have already entered into contracts to sell more than half our estates, and are still selling as rapidly as we can on a very small deposit on the purchase, and almost unlimited credit as to paying the balance of the purchase money, every acre we can dispose of, and as this quantity of land has been contracted to be sold at rather under thirteen dollars per acre, and as the whole of our estates, including that contracted to be sold, is already encumbered by mortgages, and the interest lands, and any land which may have been redeemed from mortgage, are the only lands disengaged from mortgage, and as there has been lately so much determination evinced by the public not to advance more money to this Company in the shape of bonds at par bearing 7 per cent. interest, there surely must be some defects in the arguments used at the late meeting on behalf of the "poorer and weaker Shareholders," and the "many Shareholders that would be unable to meet their calls." If the 1,250,860 acres of lands contracted to be sold, and for which we are not likely to be paid for some time, be amongst the best of the land and land most conveniently situate, and this has realized only 15,311,440 dollars, surely this affords some key to the difficulty of raising more money on loan, and it must require not only a very strong imagination, but even the youngest of us would be very grey indeed before the mighty benefits that would one day accrue to the Company (of our estate being worth £250,000,000 sterling) be realised. But I will not further trespass on your space than to call attention to the observations made by Mr. Morrice, which point to the true position of the case. Were the whole of the Company's affairs placed in the hands of such a gentleman as Mr. Morrice, and an unreserved report made by him, instead of "private and confidential papers" being issued to a select few, even the youngest of us would not be much greyer before this immense undertaking was looked upon by the public in a very different light, and valued at a very different price to what it is now.

I am, sir, etc.,

A SHAREHOLDER, NOT A BONDHOLDER.

11th January, 1859.

REPEAL OF THE PAPER DUTY.—One hundred Members of Parliament have now identified themselves with the Newspaper and Periodical Press Association for obtaining the Repeal of the Paper Duties. This amount of strength, organised without fuss or noise, and in the course of a few weeks, speaks well for the cause. Nothing succeeds like success, says the French proverb. Now, an agitation that starts with one hundred Vice-Presidents, each writing M. P. behind his name, must be held to have commenced its career with a very remarkable success. The rest will follow. Arrangements are in progress for a deputation to the Government,—and it will include leading men connected with the press of Scotland and Ireland, as well as of England.—*Athenæum*.

THAMES TUNNEL COMPANY.—Amount of tolls for the week ending January 8, 1859:—No. of passengers, 20,586; amount, £85 15s. 6d.—*Herapath's Journal*.

MONETARY AND COMMERCIAL.

There has been quite an active demand for money for the last two or three days, and the balances at the Banking Houses has been very materially reduced. This is undoubtedly, partially attributable to the preparations for the paper maturing on the fourth, and partially to the increased wants of our merchants. Nearly all the first class paper, however, was discounted by the regular houses at 10 and 12 per cent. for their own customers, only outsiders being mostly thrown out. Remittances from the country are light, and must continue so till the returns from the next harvest. In the meantime business is becoming more active, and the accumulation of capital in the financial centers will be constrained into activity, credits will have to be extended and with a good harvest to enable the farmer to pay his debts, all will be well.

Exchange is scarce, but without change in rates.

The English Bank movement for the week ending the 9th of February gives the following results when compared with the previous week :

Public Deposits.....	£7,329,287....	Increase..	£303,653
Other Deposits.....	14,484,966..	Decrease..	79,171
Rest.....	3,365,590....	Increase..	82,752
Government Securities..	10,695,147....	Same as before.	
Other Securities.....	16,512,819....	Decrease..	272,740
Notes unemploye.....	12,625,085....	Increase..	529,050

The amount of notes in circulation is £20,618,483, being a decrease of £381,215; and the stock of bullion in both departments is £19,461,005, showing an increase of £166,983 when compared with the preceding return. The half-yearly dividend of the establishment will be made at the rate of 7 per cent. per annum.

The statement of the Auditor of State in regard to the fifty-five Banks of Ohio for the quarter ending the first Monday in February, show, including the Independent, Free and State Branches, the following condition:

RESOURCES.

Specie.....	\$ 2,017,316 25
Eastern Deposits.....	1,573,732 29
Notes of other Banks.....	965,237 50
Due from other Banks and Bankers.....	1,190,564 41
Notes and Bills Discounted...	11,685 542 65
Bonds of Ohio and other States	2,269,321 53
Real Estate and Personal Property.....	679,187 56
Checks and other Cash Items..	122,497 93
Other Resources.....	1,074,339 92
Total.....	\$20,997,736 04

LIABILITIES.

Capital Stock.....	\$ 3,538,625 00
Safety Fund.....	1,561,169 30
Circulation.....	8,540,717 50
Due to Bank and Bankers....	854,179 21
Due Individual Depositors....	4,601,926 57
Dividends Unpaid.....	5,368 50
Contingent Fund and Undi- vided Profits.....	362,381 64
Discount, Interest etc.....	265,330 25
Bills Payable and Time Drafts	47,2 78
State Tax.....	19,718 14
Other Liabilities.....	81,642 35
Total.....	<u>\$21,097,736 04</u>

Our Foreign quotations are up to the 12th, by the Canada.
Messrs. BELL & Co. quote as follows :

United States 6s. bonds of 1828.....

United States 5s, 1874	94 @ 94 1/2
United States 5s, 1874	78 @ 78
Alabama 5s, bonds	97 @ 97
Kentucky 6s, 1868-72	103 @ 103 1/2
Massachusetts 5s, bonds	93 @ 93
Mary and 5s, bonds	95 @ 97
Ohio 6s, 1886	95 @ 97
Mississippi 5s	14 @ 16
Pennsylvania 5s	82 @ 84
Pennsylvania 6s, sterling bonds, 1877 - ex. div.	86 @ 87
Tennessee 6s, bonds	84 @ 86
Virginia 6s, 188-6	85 @ 87
Virginia 5s, 1888	84 @ 86
Boston City 5s	90 @ 92
Boston City 4 1/2s	9 @ 95
Illinois Central 7s, 1860, Freeland	82 @ 84
Illinois Central 7s	79 @ 81
Illinois Central 6s, 1875	77 @ 79
Illinois Central Shares	36 @ 34
Michigan Central 8s, 1869	85 @ 87
Michigan Central @ 100 shares	43 @ 50
New York Central 7s, 1864	93 @ 95
New York Central 6s, not convertible, 1883	84 @ 86
New York Central Shares	77 @ 79
Eric Railroad, 3d mortgage, 1888	70 @ 72
Eric Railroad, 3s, Conv. and Sinking Fund	38 @ 42
Eric Railroad Shares	13 @ 15
Panama Railroad bonds, '69	100 @ 102
Panama Railroad bonds, '65	93 @ 97
Pennsylvania Central bonds, 1st mortgage, conv	90 @ 92

The following is the statement of the coinage at the U. S. mint, for the month of February, 1859:

	No. of Pieces.	Value.
	GOLD COINAGE,	
Eagles.....	3,398	\$33,980
Quarter Eagles.....	24,518	61,295
Three Dollars.....	9,391	28,173
Gold Dollars.....	24,538	24,535
	61,842	\$147,983

	SILVER COINAGE.	
Half Dollars.....	112 000	\$51 000
Quarter Dollars.....	314 000	76 000
	<hr/> 406 000	<hr/> \$127 000
	COPPER.	
Cents.....	2 700 000	\$27 000
	<hr/> RECAPITULATION.	
Gold.....	617 342	\$147 933
Silver.....	409 000	127 000
Cents.....	2 710 000	27 000
Total.....	<hr/> 3 167 342	<hr/> \$301 933

CINCINNATI STOCK SALES.

BY HEWSON AND HOLMES.

March 2, 1859.

BONDS.

\$12,000	Cin., Ham. & Day. R. R. Co. 7 per cent. 2d Mort. Bonds.....	85
\$5,000	Little Miami R. R. Co. 6 per cent. 1st Mort. Bonds.....	85½
\$2,800	Col. & Xenia R. R. Co. 7 per cent. Div'd Bonds, da 1860.....	98
\$4,000	Gov. & Lex. R. R. Co. 7 per cent. 2d Mort. Bonds.....	50
\$7,000	Ohio & Miss. R. R. Co. 7 per cent. Construction Bonds.....	92½
\$2,000	Indianapolis & Cin. R. R. Co. 7 per cent. 2d Mort. Bonds.....	85
\$1,600	Indianapolis & Cin. R. R. Co. 7 per cent. Div. Bonds.....	78
\$3,000	City of Cincinnati 6 per cent. Municipal Bonds.....	92
\$1,000	City of Covington, Ky., 6 per cent. Bonds issued to Cov. & Cincinnati Bridge Co.....	60½

STOCKS.

140	Shares Indianapolis & Cin. R. R.	58
100	" " " "	39
70	" " " "	60
100	Little Miami R. R. 30 d's	85
36	Columbus & Xenia R. R.	84
20	Cin., Ham. & Day. R. R.	57
100	Cincinnati Insurance Co.	90
100	City Insurance Co.	85
50	Farmers' Bank Ky.	125

Since the date of our last issue, the transactions in Stocks and Bonds, although not large in amount, have been characterized by a very firm feeling, and, in the leading Bonds and Shares, a very respectable advance has been established. The same general feeling of confidence noticed in our last report, still continues, and the tendency of prices is still upward.

We quote little Miami Shares at 85; Indianapolis and Cincinnati at 58 to 60, an advance of from three to five per cent.; at the latter price it is now held firm. Columbus and Xenia Shares at 84, also an advance; Hamilton and Dayton two per cent. advance, quoting at 57.

In Bonds, we quote Cincinnati 6 per cent., Municipal at 92; Little Miami 6's at 85½; Hamilton and Dayton 2d mortgage 7's, at 85; Columbus and Xenia 7's dividend, at 98, being an established and large advance from our last quotations.

We have no important change to notice in the Money Market, the demand and supply remaining about equal. Good names meet with ready sale at our Discount Houses, at 10 to 12 per cent., while the street rates range from 18 to 24 per cent.

The Exchange Market is without change, and we continue to quote 30 prem. buying, to $\frac{3}{8}$ prem. selling, as the rates upon all the principal Eastern Cities, excepting the Commercial Bank and Bank of the Ohio Valley, who continue to draw at $\frac{1}{4}$ prem. Sight on New Orleans, $\frac{1}{4}$ to $\frac{3}{8}$ prem; Gold, $\frac{1}{4}$ to $\frac{3}{8}$ prem.

THE IRON RAILROAD.

We have drawn the following items from the books of the Iron Railroad Company—receipts and expenses for the year ending January 1, 1859:

RECEIPTS.

From Freight Transportation.....	\$25,308 40
" Passengers.....	3,621 31
" Rent Rooms in Depot.....	21 00
" Discount on five Bonds bought in.....	500 00
" Interest on unpaid Freight.....	1,401 04
	30,851 70

EXPENSES.

Train Expenses.....	\$5 083 97
Fuel, Oil, etc.....	1,210 74
Repairs of Road and Machinery.....	11,118 80
Interest on Bonds, etc.....	3,333 67
Repair of Building.....	12 00
Incidental and Taxes.....	2,665 65
	23,434 23

Net profit.....	7,417 52
For the year previous, ending Jan. 1, 1858, the total receipts were.....	\$32,543 82
The expenses were.....	21,420 48

Net profit.....\$11,192 98

During the past year the repairs of Road and machinery were more than ordinarily heavy, over 3,000 more than in the year before, which reduced the net profit.

The length of the road is thirteen miles. The amount of the capital stock paid in is about \$118,000.

The financial condition of the road is most excellent. The total indebtedness, including outstanding, is Bonds, about \$45,000; the available means about \$20,000—we do not give the precise figures—and there is on hand a quantity of ties for new track, and \$5,000 worth of T rails. During the past year an attempt was made to buy in some \$15,000 or \$20,000 of the outstanding Bonds at 90 cents on a dollar, but they could not be obtained, only to the amount of \$5,000.—*Ironton Register.*

CONNECTICUT RAILROADS.—From the Annual Report of the General Railroad Commissioners of Connecticut, we extract the following particulars of the length of each road in that State, (fractions of miles excepted.) with the gross earnings, net earnings, and dividend for year 1857, and the surplus of each at the end of the year:

Names.	Length of road. miles.	Gross Earnings. 1857.	Net Earnings. 1857.	Dividends. 1857.	Surplus.
N. Y. & N. Haven 62	1,057,154	\$421,601	3 p. c.	\$287,072	
N. H. & Hartford 72	769,036	340,134	10 p. c.	..	
Nor. & Worcester 64	287,756	3,765	..	..
H. P. & Fishkill 122	367,495	166,162	..	..
N. L., W. & Pal 66	115,413	..	..	..
Housatonic..... 74	318,475	4,053	..	156,960	
Naugatuck..... 57	269,555	56,676	..	206,739	
Dan. & Norwalk.. 23	61,544	27,012	6 p. c.	37,070	
N. H. & Northton 55	172,368	..	\$5 p. sb.	99,292	
N. Y. P. & Boston 50	225,138	85,672	2 1/2 p. c.	4,836	
N. H., N. Lond. and Stonington..... 50	157,657	50,810	..	..
B. & N. Y. Central 74	88,482	7,052	..	..
Total miles.....	771				

THE MISSOURI AND MISSISSIPPI UNITED—THE FIRST TRAIN THROUGH FROM HANNIBAL.—Agreeable to expectation and announcement, both ends of the Hannibal and St. Joseph Railroad were made to meet on Saturday evening last, the 12th inst., and the first through train from the Mississippi, Father of Waters, reached here on Sunday evening, thus uniting by iron bands the two great rivers, and drawing the Great West into the middle of civilization. St. Joseph is no longer in the West—that mystic region is now somewhere in the neighborhood of Pike's Peak and the Rocky Mountains. The first through train brought legions of gold seekers from the North and East, who come as the pioneers and advance guard of thousands yet to follow.—*St. Joseph Journal, Feb. 15.*

McCALLUM, BRISTOL & CO.,
BRIDGE & DEPOT BUILDERS.

McCallum, Bristol & Co., are prepared to construct **McCALLUM'S PATENT INFLEXIBLE ARCHED TRUSS BRIDGE**, for Railroad and Highway purposes at any point in Ohio, Indiana, Illinois, Missouri, Iowa, Wisconsin and Minnesota on as favorable terms as any other bridge, and in the most approved and perfect manner. Parties desiring information, will please apply to the firm at their Office 99 Third St., Cincinnati, or to McCallum, Seymour & Hawley, No. 110 Broadway, N. Y. Ag. 26.

PROSSER'S PATENT
ORIGINAL LAP-WELDED
IRON AND STEEL BOILER TUBES,
SAFE FROM END TO END.PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.
SOLE IMPORTERS.

PROSSER'S PATENT SURFACE CONDENSER for high pressure steam, with sea or other bad boiler water, gauges, 3 cutter drills, counter-sinks, tube end cutting bars, expanders, tube scalers, steel wire and whalebone brushes, pull lever wrenches, tubes—plain or enameled, screwed together for Artesian Wells, HOLLOW SLABS for various purposes, Steel for Rollers.
THOS. PROSSER & SON,
27 Jan. 28 Platt Street, New York.

LANE & BODLEY
MANUFACTURERS OF
WOOD WORKING MACHINERY,
AND
CIRCULAR SAW MILLS.

Lane & Bodley's celebrated Power Mortising Machine and all Machinery used in Rail Car Shops.

Corner John and Water Sts., CINCINNATI, O.
Jan. 5 ff.

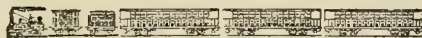
WRIGHTSON & CO.,
BOOK & JOB PRINTERS,
NO. 167 WALNUT STREET,
CINCINNATI, O.

Public attention is respectfully directed to this establishment, in the assurance that ample satisfaction will be given as regards Typography, Press Work, and Charges, to those who may require Ornamental, Common, or Book Printing. Printing from Stereotype Plates. We are better prepared to do business in this line than other house in the West.

Druggists Labels,

Are printed in the neatest manner, in Gold Silver, or Copper Bronze, on Satin, Splendid Glazed Colored Papers, or Cards, unequalled for brilliancy, at very low prices.

1858 1858.

CINCINNATI AND ST. LOUIS.
Through without Change of Cars,
OHIO & MISSISSIPPI
(BROAD GAUGE)

RAILROAD.

TWO DAILY TRAINS FOR

Louisville, Vincennes, Evansville,
Cairo, and St. Louis,

At 9:00 A. M. and 10:30 P. M.,

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M.
ACCOMMODATION TRAIN at 5:20 P. M., daily, (Sundays excepted,) for Seymour.

FOR THROUGH TICKETS

To all points West and South please apply at the Union offices, No. 2 Burnet House; south-east corner Broadway and Front street, and at the Depot, corner Front and Mill streets.

P. W. STRADER, General Ticket Agent.
Omnibuses call for passengers.

MOSELEY'S
TUBULAR WROUGHT IRON

ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeted always Iron.

The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges.

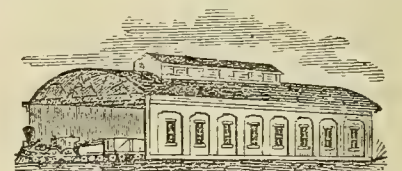
We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

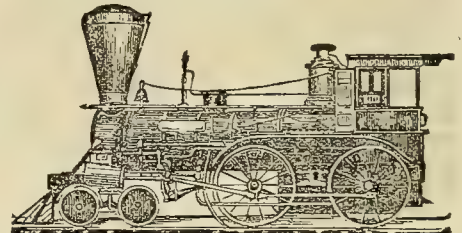
Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O.
may 13. MOSELEY & CO.

CINCINNATI
LOCOMOTIVE WORKS.

The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20 MOORE & RICHARDSON.

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MILITARY INSTITUTE,

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of **Col. E. W. MORGAN**, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, but more extended in Mathematics, Mechanics, Machines, Construction, Agricultural Chemistry and Mining Geology; also in English Literature, Historical Readings, and Modern Languages, accompanied by daily and regulated exercise.

Schools of Architecture, Engineering, Commerce, Medicine, and Law, admit of selecting studies to suit time means, and object of Professional preparation, both before and after graduating.

The twelfth annual term is now open. Charges, \$102 per half-yearly session, payable in advance.

Address the Superintendent, at "Military Institute, Franklin Springs, Ky.," or the undersigned.

P. DUDLEY.
President of the Board.

Jan. 5 ff.

Union Works, Baltimore.

POOLE & HUNT,

Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

CASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap2

ANDERSON, GATES & WRIGHT,

STATIONERS, BOOKSELLERS,

—AND—

Blank Book Manufacturers,

No. 112 MAIN STREET,

East Side, between Third and Fourth Streets,

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,

Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,
(Successors to JACOB ERNST.)
112, Main Street, Cincinnati

SCHENECTADY

Locomotive Works,

SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,

AND TENDERS, AND

RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding the work to any part of the country, without delay.

JOHN ELLIS, Agent.

WALTER McQUEEN, Supt. Ad 16.1y

N. B.—We have two Freight Engines on hand suitable for the 4 feet 10 in gauge. Cylinders 16 inches diameter, 22 inches stroke. Driving wheels 4½ feet diam. December 18th, 1858.

D. M. CARHART,
TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address. Respectfully Yours,

D. M. CARHART,
Box 183 1 Cleveland, Ohio.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers

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G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

BUSH & LOBDELL,

Wilmington - - - - - Delaware.

MANUFACTURERS OF

CHILLED WHEELS

AND

TIRES,

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Ext. nt

FOR THEIR

CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE.

WITH OR WITHOUT AXLES.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

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TUBULAR RAIL.



Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America, by STEPHENS & JENKINS, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:

The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater.

Its welding nearer perfect, and

Its durability superior.

Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

Reference is made to the officers of all the rail roads in the vicinity of Cincinnati.

Additional particulars and circulars may be had by addressing

E. W. STEPHENS,

Cincinnati, Ohio.

AMERICAN AND FOREIGN PATENT AGENT.

THOMAS D. STETSON,

SOLICITOR OF PATENTS,

And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

Winter Arrangement.

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RAILROAD.

GREAT NATIONAL ROUTE.

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood, and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the

West, South-West and North-West.

TWO TRAINS

Leave Wheeling daily, at 12:20 P. M., and 10:26 P. M.

Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.

Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone, by other lines.

Time as quick and fare as low as via any other Route.

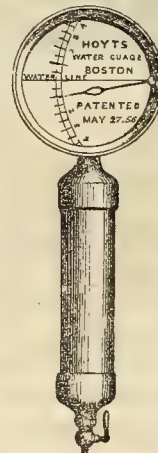
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HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

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GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

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Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

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SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855—13

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SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c

Particular attention given to the superintending of

LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description,

While under construction.

AGENT FOR THE PURCHASE of, on commission

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ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES

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CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,

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THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK and BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

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TWO TRAINS LEAVE CINCINNATI DAILY,
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9 A. M. and 11:30 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 9 and 11:30 P. M. trains.

The above Trains arrive in Baltimore at 7:35 A. M., 5:05 P. M., in Washington 10:40 A. M., 7:05 P. M.

Inquire or Tickets via BALTIMORE & OHIO RAILROAD.

FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:30 A. M., 8:30 A. M., 3:30 P. M., and 5:30 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

FOR THROUGH TICKETS,

And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRESOTT SMITH, Master of Transportation
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1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th.
low by Corby, Gossin & Co.'s make for sale very
low by TRABER & AUBERY,
7 Public Landing

LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY, NOVEMBER 29th, 1858, Trains leave Cincinnati as follows:

9 A. M. DAY EXPRESS—Stopping at Way Stations.

4:15 P. M. ACCOMMODATION—For Xenia and Springfield, stopping at intermediate stations.

11:30 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Corwin, Xenia, and London

Connections are Made by the 9 A. M., and 11:30 P. M. Trains for

ALL THE EASTERN CITIES.

The NIGHT EXPRESS Train leaving Cincinnati at 11:30 P. M., runs daily, except SATURDAYS. The other trains run daily, except SUNDAYS.

FOR THROUGH TICKETS

And all information, apply at the Offices, Walnut Street House, bet. Sixth and Seventh; No. 1 Burnet House; south-east corner of Broadway and Front streets, and at the Jasteru Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Superintendent.

Omnibus calls for passengers.

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RAILROAD IRON.

1000 TONS Railroad Iron, weighing about lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by
March 1st. VOSE, LIVINGSTON & CO.,
Feb. 25, 1858. 9 South William St., N. Y.

GENERAL RAILWAY SUPPLY AGENCY. SNOOK & HILL'S PATENT LOCOMOTIVE LAMPS.

83 Liberty Street, Cor. of Broadway,
NEW YORK.

JOHN W. KELLY
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

RAILROAD ENGINES & CARS,

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HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,

JUDSON'S GOVERNOR VALVE.

Orders solicited and promptly filled.

Monday, Nov. 29, 1858.

Cincinnati, Hamilton & Dayton RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6:00 A. M.—Dayton, Toledo, Sandusky and Detroit Mail Express. Also for Lima and Chicago.

6:00 A. M.—Richmond, Indianapolis and Chicago Express

8:40 A. M.—Cleveland and Pittsburgh Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

5:40 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR
ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6:00 A. M.—Dayton Mail Train—For Springfield, Sandusky and all points on that road. Connects at Urbana for Columbus; arrives at Columbus at 12 noon; at Forest with trains East and West; at Clyde for Toledo, Detroit and Chicago, arriving at Detroit at 7:30 P. M. Also at Clyde with trains for Cleveland, Buffalo, &c. Passengers by this train dine at Forest, at 12:30 P. M.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Fort Wayne and the West; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

6:00 A. M. Train for Richmond, connects with Indiana Central Road for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities. Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

8:40 A. M.—Cleveland and Pittsburgh Express, via, Delaware Cut Off—For Cleveland, Dunkirk, Buffalo, New York and Boston. Also makes close connections at Crestline for Pittsburgh, Philadelphia, Baltimore, and all Eastern cities.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburg, Philadelphia, Baltimore, etc.; at Forest for Chicago; at Clyde for Toledo; at Sandusky, with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburg and the East.

4:30 P. M.—Indianapolis and Chicago Express.—Connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

5:40 P. M.—Train for Hamilton and all way stations

RETURNING TRAINS

Leave Dayton at 8:20 A. M., 4:15 P. M., and 7:30 P. M.

Leave Hamilton at 7:00 A. M., 9:17 A. M., 11:30 A. M., 5:42 P. M., and 9:05 P. M.

TRAINS ARRIVE IN CINCINNATI.

From Hamilton 8:05 A. M., and 12:40 P. M.—From Dayton at 10:52 A. M., 6:50 P. M., and 10:10 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

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PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw and Drills, Shingle Machines, &c.

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LEE & LEAVITT

The Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

Thursday Morning, March 10, 1859.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

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One square, single insertion,.....	\$1 00
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“ “ six months,.....	12 00
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THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

THE POST-OFFICE GUIDE.—C. S. Williams, of this city, has just issued a very useful little book with this title. It embraces a full and accurate List of Post Offices in the United States brought down to the present date, and a variety of other Post-Office information that will be found very useful to a large class of business men.

The last published list of the kind was issued in 1856, and as there has been some three thousand changes since then, and many new offices established, the present publication is quite opportune.

The book has the best authority for its correctness, and value, and post-masters throughout the country are supplying themselves with it, the Department having failed to meet their wants in this particular.

The low price, twenty-five cents, must secure it a very large sale among merchants, traders, and all persons who use the Post-Office. See advertisement in another column.

IF The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

IF Railroad Presidents, Superintendents and Secretaries, are requested to send us copies of all Annual and other Reports they may issue, together with their Monthly Statements, and such other matters of interest as they may be willing to furnish us.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

IF We send this number of our paper to a number of gentlemen and firms, who are not now subscribers or advertisers. Will they have the kindness to examine it?

IF Wm. H. HUGHES, Esq., will accept our thanks for copies of the Tenth and Eleventh Annual Reports of the Virginia and Tennessee Railroad Company. A more extended notice in our next.

MISSISSIPPI AND TENNESSEE R. R.—We are indebted to F. M. WHITE, Esq., President of this Road for copies of Reports made in October. We will notice more fully in our next.

THE SPRING OF 1859 COMMERCIAL—LAWS OF CLIMATE AND SEASONS—FUTURE PROSPECTS.

The spring of 1859 opens under very auspicious circumstances; yet, we hear many croaking. One thinks there will be a flood of paper currency in the new States; another, that the diminution of European immigration will diminish laborers; a third, that the country is much in debt; and a fourth, that the government will ruin the country; and the fifth, that the morals of the country are corrupted. When men take a dark view of things, and are disposed to find fault with either the operations of Nature, or those of society, it is easy to find reasons to support their opinions. Human nature is any thing but perfect. The seasons are not always regular. Society is fickle, and often depraved. Dealing with these imperfect and irregular elements, the wisest plans and closest calculations are sometimes deranged, and lead to disappointment. What then? Did any body expect perfection? But, what is there in the aspect of the times, which is not apparently auspicious? We candidly say, that in reference to business, or the progress of society, or the aspect of nature, we have in some length of experience, never seen a promise of a better business, or more prosperous enterprise, than that which the spring of 1859 promises.

Let us look at it in reference to Nature, Trade, and Locomotion.

1. IN REFERENCE TO NATURE.—We consider the most important element, in the consideration of commercial prospects, to be the crops. The crops, on the other hand, depend very largely upon the season. Now, have we any elements by which we can calculate the season with any certainty? We believe that they can be estimated in some particulars. For example, we have these general facts:

1. We know that in a series of years, a certain *average of rain* or water, descend; and that nature equalizes her operations.

2. We know that the *average temperature* is the same, in a series of years.

3. We know that the *wind* will average a certain length of time, in a series of years.

Now, reviewing this, if any one or two years depart widely from this average, it may be considered certain, that nature will sooner or later restore the balance, by going as much the other way. If a fixed average must be preserved, then, it is inevitable, that the diminution, on one side, must be supplied by an equal exaggeration on the other. Applying this principle to the facts, we find this to be the result, that as we have had a mild winter in opposition to the severely cold ones, two or three years since, so in all probably we shall have a dry summer. It is not likely to be an absolute drouth, but rather a return to the natural summer of the climate—dry and hot. For, as we are informed in the Report of the Commissioner of Statistics, there fell *twelve*

inches of rain in 1858, above the ordinary average. This being the case, a dry season must be found somewhere; but, not necessarily all in one year. We have had *two remarkably cold winters*, then an average one, and now a mild one. We shall probably have two or three mild winters, and two or three dry summers. If this be a fair inference, it is also fair to say, there is a *promise* of good crops of all kinds. For, dryness, *short of drouth*, will not injure the crops; but, on the contrary, is needed.

The ground is every where saturated with water, and nothing but a great drouth will cause any want of water nutriment. The future is unknown; but such, we say, are the aspects of Nature, and the promise of the seasons.

2. As to trade, there never opened upon the country a better promise of a prosperous season. The country has been restricted in trade by the financial calamity of 1857; by the fear of coming events; by the shortness of the crops of 1858; and by the general disposition to pay debts, and to economize expenses. The debts of the country have been diminished; the imports have been reduced; the business of Railroads have been curtailed; and all this has produced a most salutary effect. The aggregate debt of Ohio does not, at the present moment, exceed twenty per cent. of its property (including all classes of debt,) and surely *one-fifth* of the entire property in the form of debt, is but a comparatively small amount. The property of Ohio is more than a *thousand millions*; and its entire debt does not much, if any, exceed two hundred millions. It is true, that most of the Central and Western States are not nearly as well off as this; but, at the present moment, there are probably not half a dozen out of thirty-two States, which are so seriously in debt, as to cause any reasonable anxiety. In truth, whatever may be said about debt, extravagance, speculations, etc., etc., the American people, in 1859, are probably the freest from debt and speculation of any nation whatever. Extravagance we must plead guilty to; simply, for the reason, that we have had extravagant means. Besides, with the most extraordinary commercial prosperity, there was hardly the possibility of avoiding extravagant schemes, expenses, and ideas. But, the increase was greater than the expense, and while the moral effect may be lamented, it is entirely blameless as to trade and finance.

The time has now come, when trade, reviving from its lethargy, will be rapidly and powerfully extended. Partly from foreign imports; partly from domestic manufactures, and chiefly from the general revival of industry and commerce. The prospects of Trade, in 1859, are, therefore, most flattering.

3. OF LOCOMOTION.—We have, in the midst of commercial depression, constantly held to our readers, the idea that *time* only, and that not very long, was necessary to the full pros-

perity of all Railroads, which *were worthy of success*; that is, founded upon the need of the country, and upon just estimates of growth in business. We think we see the fast coming realization of that idea. There are several railroads in the West, where business has been much greater in the last four months, than in the corresponding months of the year before. This is the beginning of a new influx of business to the roads. It is true, that no great increase can take place, till we get new and better crops. But, there is an increase to be expected from other sources, which, we believe, will more than counterbalance the loss of transportation on the last crops. These are the increase of merchandize, manufactures, and passengers; and these, we believe, must increase rapidly.

We have now gone over the grounds of our belief in the general business prospects of 1859. It is based on the idea that there will be no great Providential calamity; but, all the ordinary causes of things will go on. Providential calamities are not to be taken into view, in calculations of business. They may occur, but we hope not; and are ready to trust in all events, to the mercy and goodness of God.

LETTERS FROM W. WRIGHTSON.

SANTA RITA, ARIZ., Feb. 6, 1859.

T. WRIGHTSON, Esq.:

Dear Sir:—When I last wrote you, I informed you of the purchase of the Mission and Rancho of Tumacacon, and the progress of the work of cleaning out the mines. Since then we have been occupied much as before. In the Salero, we have gone far enough to show that the mine was formerly worked in a regular manner by sinking shafts and drifts, and leaving pillars between them. After the early discoverers were driven off and later workers came on, they contented themselves with ganging out these pillars, thus working the wall rocks, but giving the best possible evidence that the ores of the mine were valuable. Early in this week the water became so troublesome that we were obliged to discontinue work in the Mexican method of Tenahos, which Mr. Grosvenor had adopted previous to the arrival of better tools, and have now begun to prepare a regular shaft for a windlass, which, in turn, must give place to a whim. During the coming week we are to have the pleasure of a visit from Mr. Brunckow, of Cerro Colorado, on whose practical knowledge and experience here I place great reliance. He is to spend a week with us to examine the veins and shafts, and give us the benefit of his experience. My own impression is that we shall not only sink a shaft on the present working, but also start another one below on the mountain, where we have reason to believe that the main vein is joined by several others which cut the mountain in a direction indicating such a result. We shall then drive an

adit on the course of the vein, and thus take out ore all the way. These two shafts, if we can obtain a sufficient number of peons, will be completed in less than two months, and constitute the waste labor necessary to be put on the mine, in order to get at the ore. It is, however, probable that even these will furnish ore enough to partly pay expenses, and when we begin the drifts that we shall obtain a good supply of valuable metal.

In the Bustillio, Mr. McCarty has begun operations in the upper shaft and we are now taking out ore. We shall have half a ton of it smelted at Cerro Colorado previous to any attempt to erect our own furnaces. In this vein we propose to sink the shaft say thirty feet or more, before we attempt a drift in either direction. This will show the vein fully and establish its value. Mr. Brunckow's assays of average specimens show 385 ounces of silver to the ton of ore. I shall, however, regard the test of one thousand pounds as more satisfactory than any assay. In this vein also we shall probably sink another shaft lower down the mountain, and on its intersection with another vein.

Since the purchase of Tumacacon, I have gone over the greatest portion of the Rancho with a gentleman who is a practical farmer, and has cultivated Ranches in this country. We examined the acequias and fields, and intend putting in our crops forthwith. We shall plant barley on some of the fields as soon as they can be ploughed and made ready to receive it. Corn is usually planted later. The garden will furnish us all the vegetables we shall need, and by stocking this Rancho with cattle, we shall raise our own beef. It will be very interesting at some future day to furnish you a detailed plan of the old buildings, and give you the evidence that they were built out of the proceeds of the mines. Some of the material in the walls prove this conclusively. There is evidence of wealth and splendor here such as I have not seen elsewhere in the territory.

In the matter of supplies, I have made arrangements for flour and beef cattle sufficient for the next four months, and for some oxen and cows also. We now need and are making arrangements for more peons to push forward the shafts. The country here needs population of the right sort. I do not by this mean emigration from the States, but the emigration which brings with it bone and sinew—an emigration which does not consider labor degrading. For this we must look to Mexico and offer its people our protection.

Yesterday at the urgent solicitation of Capt. Ewell and Mr. Brevoort, we went to visit the Patagonia Mine in the Santa Cruz Mountains. It is beautifully located high up in the mountains, and yet accessible by a tolerably good wagon road. The ores are mainly those of lead, with a small quantity of silver. The vein shows wide and regular, and is easily worked. Every visit to other mines, however, makes

me better satisfied with our own, and increases my confidence in their productiveness. I trust it will not be long before I can report you a good result every week.

I am, dear sir,

Yours truly,

W. WRIGHTSON.

SANTA RITA, Arizona, Feb. 14, 1859.

T. Wrightson, Esq., Cincinnati, O.

DEAR SIR:—Since I wrote you last we have been pursuing our business at the mines, and at the Mission Tumacacori, as rapidly as our facilities would permit. A week ago to-day, Mr. Brunckow, of the Sonora Exploring and Mining Company, came over according to arrangement, to visit and examine our different veins and works, and to give us his opinion of the proper method of working them. He considers the Salero as the best, most regular, and most promising vein, and recommends that our principal efforts be directed towards the development of this mine. You are already informed that the operation of cleaning out the old dirt in the mine was stopped by water. We had gone far enough to show that the vein was good and regular, and that the mine was originally worked in a regular way, as Mexicans understand the term. By the advice of Mr. Brunckow we have decided to open the vein now in a scientific manner, by sinking working shafts to such a depth as will attain the best ore, and then working by drifts. For this purpose we have begun to timber the old opening which had been left weak by the removal of the master pillar. This is necessary to prevent accident and the falling in of the walls. I am sorry to report, however, that this is a slow and expensive operation. We have had to haul timber from one to two miles over a very rough, bad road, and then up the mountain. The timber we use is mostly oak, and requires labor to straighten it. The work is well done, and will last as long as the shaft will be used, or timber resist decay. To facilitate this operation we are improving the road up the mountain, and to-day the Mining captain with his assistant peons have established themselves in tents close to the mine. The water there can be depended on about eight months in the year, and for the rest, they will either use water from the mine, or have it hauled there, if the water in the mine is not fit for use. As soon as sufficient timbering is done to render the shaft safe, we shall push forward this shaft with three gangs of hands working night and day, and will then be able soon to strike paying ore. In the meanwhile if facilities can be obtained, we shall open a shaft at the foot of the mountain on the main vein, and about where it is intersected by auxiliary veins. In this shaft we hope to reach good ore very near the surface and to begin a drift towards the mountain and the present workings. Of the progress of these works I will keep you duly posted.

In the Bustillo we are sinking the upper shaft at the rate of about a foot a day. The vein improves as we descend, and the ore seems to grow richer in silver. It also widens considerably. When we have attained a depth of about thirty feet, here, we hope to find this shaft a little more than self-sustaining, and that as we go deeper the ore will become more abundant, and warrant commencing a drift. We intend also to sink two other shafts in this vein.

We have also to begin work soon on several other veins, which we can not now attempt for want of hands, but which we hope soon to be able to make tell to good account.

The commencement of all these permanent improvements and the erection of the buildings and shops, constitute the dead work in a mining enterprise, but are necessarily the first things to be done. And in a country destitute of population like this, and depending on a neighboring State for its laborers and its supplies, require time and patience to accomplish. They are like the machinery of a factory, and while they bring no profit till they are completed, yet they are sure of producing a good result, when that end is once attained. The ores of the Salero and Bustillo will both yield a handsome return, much better than the average of mines in Mexico, or even in this territory. We must, however, get the mines in proper condition to take out the ore in large quantities, which can only be done by sinking a number of shafts, and opening drifts each way at every possible spot. When we have got this done I think we shall fully meet the anticipations of the most sanguine.

In the matter of supplies, when we first came there was not in Tubac provisions enough to last us a month. I have contracted for four months supplies from Sonora, and do not anticipate any lack of eatables at least for that period. Before that is over we shall engage more from the same source. We also hope to raise a portion of our own supplies at Tumacacori, and are now preparing the fields for cultivation.

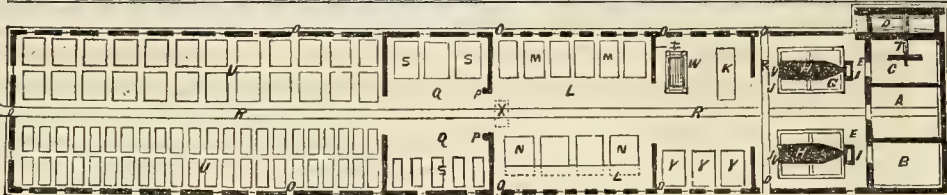
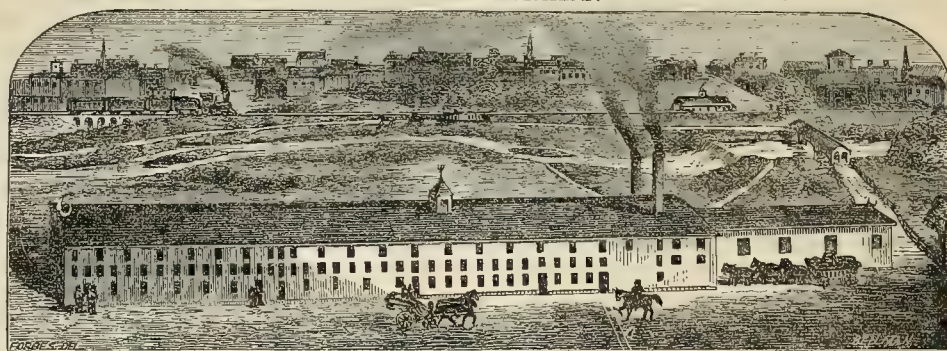
Hoping that we shall be favored with some correspondence from the Home office,

I am Truly Yours,
W. WRIGHTSON.

The Hannibal Messenger, of March 3d, contains a long and glowing account of the celebration of the opening of the "Hannibal and St. Joseph Railroad." The orator, Hon. MILLARD P. HALL, is said to have delivered one of the best orations ever "got off," on such an occasion. We regret much that we were unable to be present.

The Bill providing for the construction of a series of Railroads in the streets of New Orleans, has become a law, and the controller is to advertise three months for proposals for building the roads.

KENNEDY'S IMPROVED TANNERY.—GROUND PLAN.



MR. EDITOR:—I expressly call the attention of your subscribers, and all who may be interested in this subject, to the new and peculiar improvement in Tan Yards, patented January 22d, 1856, by Mr. David H. Kennedy, of the city of Reading, Pennsylvania. The application for a patent on this improvement was made in the year 1850; but was delayed on account of several pretended owners, it became in litigation, and the priorityship became the strength of battle. After a series of years, with great expense, our above friend was declared the victor. By this improvement there is an actual saving of one half of the time absolutely necessary, and at the outside calculation, three-fourths of the expense only is required. The numerous and great advantages of this invention both to the manufacturer and to the consumer, are matters on which the most satisfactory information may be obtained.

The adoption of this improvement by every tanner in the United States, is practicable. It consists chiefly in the application or the arrangement of conductors for flowing the Tan Liquor through the several vats for the purpose of separating the tanning from the water, thereby manufacturing a tanning ooze of graduated strength, thereby causing a much more rapid advancement in the tanning of leather than is or can be produced by the ordinary plans. It requires no great expensive outlay. This improvement will be found of great general economy and utility—many of the most experienced, scientific and enlightened tanners, and other artizans connected with the manufacture and sale of leather, have certified to the superior excellence of this invention. The leather manufactured by this improvement, possesses all the essential properties requisite for beauty and utility. We believe a similar opinion is entertained by all who have carefully examined the leather, and who are competent to form a correct judgment of the article manufactured. Leather

forms one of the heaviest items among the staples of American merchandise, and the demands for it are daily increasing in addition to its extensive employment for the embellishment of objects of taste and ornament.

The following gentlemen have given certificates announcing the recommendation of the improvement in the highest terms:

William Roney, Robert Culbertson, J. F. Forbus, H. Rasche, Michael Eckert, Lang & Wanner, H. & G. R. Martin, A. McCabe, Huber & Schew, Cincinnati, Ohio; Richard Woolly, Franklin, O.; Louis Ballauf, Superintendent for A. M. Taylor & Co., Cincinnati, Ohio.

These gentlemen say that they consider it the most economical and efficacious method now in use. Embracing the saving of bark, labor, and time, and, therefore, recommend the improvement to every tanner.

I have examined the invention and am convinced beyond doubt of its immense superiority. I the more readily subscribe my hearty good wishes for the success of the improvement, from the personal testimony of immediate friends, interested in the leather and tanning business, and who unanimously and unequivocally pronounce it the most perfect invention of its kind.

I would certainly recommend all interested persons to enter into this matter with spirit, for it is beyond contradiction, the greatest of all modern business discoveries for the absolute coining of money. The secret of its use is a standard capital of itself.

I say, then, look to it well; for now, while it is yet new to the world, is the most ready time for its unopposed use, being hindered in its course neither by competition nor public opinion. Mr. K.'s terms for the rights of the improvement are undoubtedly reasonable. The Post Office address of the Patentee is New Alexandria, Pa.

A PRACTICAL TANNER.
Cincinnati, March 9, 1859.

PROGRESS IN LOCOMOTIVES.

Among the most recent of those improvements in locomotives which have had time and opportunity to demonstrate their value by actual trial, is the diaphragm or draught regulator in the smoke box. It is only about three years since this device was made known. In this period it has been put in use on something like two hundred locomotives, and in every instance, so far as we can learn, with good success. The saving in fuel in each case is reported to be very perceptible.

The invention in its most generally adopted form, is nothing more than a simple sheet of boiler iron, made in two pieces for more convenient insertion and removal. It is inserted in the smoke box, just front of the branch steam pipes, and a large space is left beneath it to allow a much freer passage of the smoke at that point, than through smaller apertures left above. Its effect in increasing the efficiency of the boiler, although apparently magical, is perfectly in accordance with philosophical principles, and the increased heat due to the longer retention of the flame, is such that in some instances the fire door has been found to become red hot. A patent for this invention was granted on the first ult., to Mr. WILLIAM S. HUDSON, the superintendent of the Rogers' Locomotive Works, in Patterson, N. J. The first locomotive involving this feature, was the "Governor Pennington," which was sent out from the shop of that Company in the summer of 1856, to run on the line between New York and Philadelphia. The invention was introduced in the west by other parties only a few months later, and it is proved to have been in use on the Peoria and Quawka Road in December of the same year; but the decision of the Patent Office, with all the facts before it, must be considered conclusive in establishing the fact that Mr. Hudson was the first inventor.

The law by which this simple device succeeds in extracting more of the heat from the products of combustion than usual, is that of the diminished specific gravity of the hottest portions. Hot gas is lighter than cold, and the lightness is very nearly proportional to the degree of heat. A great difference exists in the temperature, and, consequently, in the specific gravity of the gases rising in the interior of a locomotive. The hottest rise with most force to the top of every chamber or flue, and compel the cooler gases to curl along underneath. The diaphragm under consideration, extends like an inverted fence across the upper portion of the smoke box, and tends to stop the hottest currents, but, *like a fence*, it is not absolutely tight, and, therefore, allows the passage of a portion. It results that when the fire is very moderate, as when the locomotive is standing still at a station, and especially during that sometimes very important period while the steam is being raised preparatory to starting, the perforations in or about

the diaphragm are of sufficient capacity to render the existence of the diaphragm of no effect; but soon as the blast pipe quickens the fire, and draws a very great amount of gases through the tubes, the current becomes too powerful to pass through these apertures, and a large portion is allowed to pass underneath. The coolest being more willing to descend than the hottest gases, the hottest are mainly the portions retarded, and as the draught is very readily managed when the hottest pipe is in operation, the effect on the flow of air into and through the fire is inappreciable. The invention appears to have solved the difficult problems not only of assorting the gases and retaining the hottest until they are cooled to the minimum temperature, but also of causing the assorting agent to operate only when it is most wanted, and to keep itself practically out of the way at all other periods.

T. D. S.

ANNUAL REPORTS

Of the Railroad and Canal Companies of the State of New Jersey for the Year 1858.

We are indebted to WILLIAM PARRY, Esq., for a copy of the above Report, just issued by the Secretary of State, for the State of New Jersey. The pamphlet contains about sixty pages of valuable and interesting statistics, commencing with the Report of the DELAWARE AND RARITAN CANAL AND AMBOY RAILROAD COMPANY, from which we gather that

The capital stock paid in of the Delaware and Raritan Canal,	\$1,500,000
To which has been added by authority of the Legislature,	798,400
The capital stock paid in of the Camden and Amboy Railroad and Transportation Co.,	1,500,000

\$3,798,400

The funded debts of the above companies are:

A loan at 6 per cent. interest,	\$800,000
" 5 " " "	231,000
" 6 " " "	235,000
" 6 " " "	367,000
" " " "	800,000
" " " "	\$1,700,000

Also, a loan of \$2,500,000 authorized by the stockholders for straightening and doubling the track of branch road, and for a subscription and advances to associated companies; of this loan only \$725,000 has been issued.

In addition to the above there has been issued a loan for £185,000 for the stock of the Philadelphia and Trenton Railroad Company, since converted into dollar bonds, at four dollars and eighty cents per pound sterling, bearing an interest of five per centum per annum.

Also, a loan of \$1,175,000 bearing an interest of six per centum per annum, for subscription to the Belvidere Delaware Railroad and branches, and Freehold and Jamesburg Agricultural Railroad Companies.

And the companies also are under obligations to pay certain small annuities to persons who have been injured on the railroad.

The cost of the Delaware and Raritan Canal and appurtenances,	\$3,909,075 62
The cost of the Camden and Amboy Railroad and equipments,	5,576,795 16
The receipts of the Canal for twelve months, ending on the 31st of Dec., 1859,	454,108 55
Expenses of the Canal for the same period,	174,064 99

Leaving nett,

The receipts of the Camden and Amboy R. R. Company for twelve months, ending the 31st of Dec., 1859,	\$1,640,327 85
Expenses of the Camden and Amboy Railroad Company for the same period,	874,167 96

Leaving nett,

Dividends have been paid in cash during the year past of eight per cent. on the capital stock of the Joint Companies.

N. J. RAILROAD AND TRANSPORTATION COMPANY.

Capital stock,	\$3,749,000 00
Funded debt, (including \$435,000, the cost of the property and privileges purchased of the Jersey associates)	711,420 00
Profit and Loss,	342,397 90
Dividends 1st Jan., payable 1st Feb. 1859,	187,450 00

\$4,990,167 90

Cost for graduation and masonry, &c.,	3,225,521 95
Locomotives, tenders and snow-plows,	140,280 00
Cars—passenger, freight and baggage,	173,015 26

Property, viz.

Bridge, ferry, turnpike and other stocks, real estate, ferry boats, privileges and fixtures, including the property and privileges purchased of the Jersey associates for \$425,000,	1,248,321 96
Cash in bank and cash items on demand,	203,018 54

\$4,990,167 90

Receipts.

From passengers,	645,403 20
From freight,	78,066 01
From U. S. mail, rents, express, freight, and other sources,	179,989 24

\$903,458 45

Expenses.

Maintaining railroads, bridges and buildings,	69,500 27
Repairs of locomotives cars and machinery,	34,677 52
Fuel, cost and labor in preparing,	51,510 17
Operating the road and transporting passengers and freight,	183,569 62
Office expenses, salaries and contingencies,	113,953 22
Total expenses,	449,370 73

\$454,087 72

Interest on bonds,	44,496 49
Transit duty on passengers and freight,	15,035 51
Tax on capital stock,	18,122 50
Dividends in cash, August and February,	262,450 00
Profit and loss to surplus earnings,	113,983 22

\$454,087 72

Total number of passengers carried,	2,110,993
Total freight, eighty-five thousand four hundred and sixty and a half tons,	83,460 1/2
Number of miles run by passenger, freight and other trains,	398,784

MILLSTONE AND NEW BRUNSWICK R. R. Co.

Length of road completed, (miles) 6 63-100.	
Capital stock paid in,	\$102,365 00
Floating debt,	8,749 00

Cost of road to date,	111,114 00
Total number of passengers,	13,737
Number of tons of goods, wares, &c.,	6,719
Receipts from passengers,	\$2,860 51
" freight,	5,010 33

Expenses,	7,870 84
	4,576 00
	3,294 84

No accidents on the road during the year.

PATTERSON AND HUDSON RIVER R. R. Co.

The President of the Patterson and Hudson River Railroad Company, reports:

That the capital stock of the said company, is now,	\$630,000
The cost of said road, including land, depot buildings, and appurtenances,	630,000

There is no funded debt of this company.

The rent of the road, &c., is, per annum,	53,400
Two dividends of 4 per cent. each, amounting to, and which has been paid in cash last year,	50,400

The road is now under lease to, and managed by another company, sanctioned by the legislature of this State.

PATTERSON AND RAMAPO R. R. Co.

Capital stock actually paid in,	\$348,225 00
Amount of funded debt,	100,000 00
Other debts, Dec. 31, 1858,	1,200 00
Cost of road and equipments,	350,000 00
Income—Rent from New York & Erie R.R. Co.	26,500 00
Amount of dividends, paid from earnings five and a half per cent. on \$248,000,	16,390 00
Expenditures for contingencies, taxes, &c.,	5,353 76
Interest on bonds of \$100,000 at 7 per cent.,	7,000 00

The road is under lease to, and operated by the New York and Erie Railroad Company.

SUSSEX R. R. COMPANY.

Capital stock paid in.....	\$175,746 00
Funded debt.....	200,000 00
	375,746 00
Cost of road and its appurtenances.....	375,746 00
Receipts from passengers and freight.....	30,941 47
Paid for operating expenses, &c.,.....	21,812 43
Paid interest on debt of company.....	18,693 49

The number of miles run by passenger and freight trains, is about twenty thousand. No dividends have been paid.

FREEHOLD AND JAMESBURG AGRICULTURAL R. R. COMPANY.

This road is in operation from Freehold to Jamesburg, a distance of eleven and a half miles.

Capital stock paid in.....	\$168,234 80
The funded debt of the company is a 6 per cent. loan, due 1880.....	20,000 00
Total cost of road and equipment.....	230,666 42
Receipts during the year 1858, from passengers.....	15,231 64
From freight.....	20,666 90
From U. S. Mail.....	572 00

Expense for working road.....	\$36,470 54
	18,586 94

Net earnings.....	17,883 60
Interest paid.....	2,037 66
Number of passengers carried during the year 1858, was.....	62,629
Tons of goods, wares and merchandise transported during the year 1858.....	23,607 1/2
Miles run by passenger trains.....	16,287
Miles run by freight trains.....	7,904

No dividends declared during the year.

MORRIS AND ESSEX R. R. COMPANY.

The condition of the company on the first day of January, 1859, and their operations for the year 1858:

Capital stock.....	\$1,157,805 00
Funded debt.....	340,000 00
Contingent Fund.....	259,114 17

	1,756,919 17
Cost of road and its appendages.....	1,610,294 46
Capital stock of Newark and Bloomfield Railroad Company.....	55,000 00
Capital stock of Telegraph Company.....	2,000 00
Wood on hand, paid for.....	9,000 00
Cash and bills receivable.....	80,624 71

	1,756,919 17
From passengers.....	134,623 93
From freight.....	90,025 72
From mails and sundries.....	7,173 17

	\$231,222 82
Paid for repairs, maintenance of the way, motive power and contingencies.....	136,703 13

There has been transported on the road during the year, 245,186 persons, exclusive of commuters and those who ride free.

Number of miles run by Trains.

Passenger trains.....	96,444 miles.
Freight trains.....	32,667 "
Wood and gravel trains.....	4,599 "

Total.....133,700

NEWARK AND BLOOMFIELD R. R. COMPANY.

Amount of capital stock paid in.....	\$103,880 00
Cost of road and its appendages to date.....	101,627 38

The company are perfectly free from all indebtedness, except the wages due to the employees, for the month of December last, and a few small items, payable on presentation.

Income from passengers, freight, &c., during the year.....	12,346 27
Paid for repairs, maintenance of way and contingencies.....	10,400 49

There has been transported over the road during the year, 80,622 passengers, exclusive of commuters and those who ride free. Total number of miles run during the year, 18,437.

The WARREN RAILROAD COMPANY present the following report of the condition of the affairs of the company up to the first of January, 1859:

Capital stock issued and actually paid in.....	\$968,000 00
First mortgage bonds due 1875—sold.....	600,000 00
Indebtedness on the books.....	712 92

Cost of said railroad.....	\$1,568,712 92
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Freight on coal and merchandise.....	177,437 10
Passenger fares.....	13,549 52
Extra baggage.....	26 62
Express.....	851 24
Transportation of Mail.....	1,260 00
Storage.....	2 04
Telegraph earnings.....	113 99

	193,240 25
The running expenses of the road, including repairs, depot agents, telegraph, &c., estimated 50 per cent.....	96,620 17

Net earnings of the road.....	97,620 17
Interest paid.....	92,820 00

Balance applicable to debts, &c.,.....	3,800 17
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The contractors are proceeding with the Van Ness Gap tunnel, and have made considerable progress the past year. The expenditure on the tunnel and otherwise, the past season, was about \$49,000. Arrangements are now being made by the contractors to work a day and night force on the east and west entrances to the tunnel, and with an improved engine, work the tunnel from the center shaft. This tunnel is 3000 feet long—the rock very hard—about one foot advance in twenty-four hours is as much as can be done to each force. The tunnel, when completed, reduces the distance in the road, about three miles, and equalizes the grade. The estimates to the contractors have been paid in cash, monthly.

CENTRAL RAILROAD COMPANY

Capital stock.....	\$2,000,000 00
First mortgage bonds.....	1,500,000 00
Second.....	1,500,000 00
Other indebtedness.....	405,920 36
Net earnings, less interest, &c.,.....	168,402 18

	\$5,374,322 54
Cost of road.....	\$4,482,843 79
Land and work at Elizabethport.....	133,470 03
Station houses and shops.....	131,800 00

	4,748,113 82
Engines.....	256,200 00
Cars.....	173,000 00

	429,200 00
Ferry interest and boats.....	256,350 00

Miscellaneous property, wood and materials on hand.....	140,658 72
	397,008 72

Receipts.

Passengers.....	\$171,829 81
Coal freight.....	360,394 76
Merchandise freight.....	229,110 88
Mail, express, rents, &c.,.....	15,598 58

Expenses.

Running expenses.....	81,535 65
Wood consumed.....	72,608 82
Coal consumed.....	16,936 47
Repairs of road.....	46,404 84
Repairs of cars, engines, etc.,.....	51,074 96
Ferry expenses.....	48,465 80
Expenses account.....	21,114 89
Miscellaneous expenses.....	7,471 36

	345,613 39
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Net earnings for 1858.....	\$491,320 24
Net earnings from 1857.....	45,484 55
Less charges from 1857.....	39,697 32

	5,791 23
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Less taxes to State for 1857.....	\$497,111 47
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" " 1858.....	22,363 27
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" " 1859.....	23,831 31
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Less interest account for year.....	277,046 36
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Less charges for renewals.....	5,448 12
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	328,709 29
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	\$168,402 18
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No dividends have been paid during the year, the net earnings having been applied to the reduction of indebtedness.

The company have no unfinished work on hand, and nothing has been spent in construction. The gravel trains have been regularly at work, and the cost included in the ordinary expenses.

Actual number of passengers carried.....	294,778 1/2
Number of persons carried one mile.....	6,500,335
Number of tons carried.....	672,550
Number of tons carried one mile.....	33,849,218
Total number of miles run by trains.....	469,917

The CAMDEN AND ATLANTIC R. R. COMPANY presents the following report:

Capital stock paid in.....	\$656,635 68
Funded debt.....	1,006,000 00
Floating debt.....	439,085 01
Cost of railroad and equipments.....	1,787,970 03
Interest paid during the year 1858.....	41,259 26

Receipts of Road for the year 1858.

From passengers.....	\$91,337 91
From freight.....	39,004 36
From other sources.....	2,819 91

	133,222 18
--	------------

Expenses of road for the year 1858, for working said road, including repairs, maintenance of way, motive power and contingencies.....	75,237 38
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No accident occurred during the year 1858.

BELVIDERE DELAWARE R. R. COMPANY.

Capital stock all paid in.....	\$1,100,000 00
Funded debt.....	2,036,000 00
Special loans not properly included in funded debt.....	69,970 03
Other indebtedness.....	127,830 96
Cost of the road and equipments, exclusive of cash and materials on hand.....	3,173,285 76

Receipts.

From passengers.....	68,993 80
From general freight.....	54,887 37
From coal freight.....	76,631 10
From mail and other sources.....	23,790 94

	\$224,303 21
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Making the whole on B. D. R. R.,.....	
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And for business on the Flemington Railroad, worked by B. D. R. R. Co.,—passengers.....	5,330 01
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From general freights.....	6,715 45
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From coal freights.....	498 00
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From mail.....	600 00
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	13,143 46
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And for both roads together.....	237,446 67
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The expenditures for making the roads during the year have been.....	141,710 88
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And the estimated expenses of working the Flemington R. R., is.....	10,489 97
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	\$131,220 91
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No dividends have yet been declared by the company.

MORRIS CANAL AND BANKING COMPANY.

Capital stock paid in.....	\$2,066,300 00
Debts, funded and other.....	531,430 60
Cost of canal and appurtenances.....	2,649,869 13
Repairs of 1858.....	61,791 78
Navigation, lock and plane tending.....	31,159 49
Superintendence and management.....	19,334 92
Income from pas'srs, tolls and other sources.....	274,650 86
Dividends paid in cash.....	101,509 69

FLEMINGTON RAILROAD COMPANY

This capital stock of this company paid in, is.....	\$150,000 00
The funded debt.....	91,000 00
The other indebtedness is.....	56,666 53

The road has been worked by the Belvidere Delaware Railroad during the past year. The receipts and income of the road has been—

From passengers.....	\$5,330 01
From freight.....	6,715 45
From coal.....	498 00
From mail.....	600 00

	13,143 46
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The cost of working the road by the Belvidere Delaware Railroad.....	10,489 97
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Other expenses.....	1,950 00
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BURLINGTON AND MOUNT HOLLY R. R. Co.

The capital stock actually paid in for 3,500 shares, at \$25 per share.....	\$87,500 00
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Borrowed from the earnings of the road, and appropriated to the construction.....	12,500 00
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Borrowed on mortgage bonds.....	20,000 00
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	120,000 00
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The cost of the road, buildings, wharf, locomotives, cars, &c.,.....	120,000 00
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The following exhibits the receipts and disbursements of the Burlington and Mount Holly Railroad and Transportation Company, from January 1st to December 31st, 1858:

Receipts.

From passenger travel.....	\$13,839 76
From freight.....	6,088 81
For carrying U. S. Mail.....	310 88
For rents, real estate.....	205 00

	\$20,444 45
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Disbursements.

Pay roll for running trains, &c.,.....	14,831 24
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Dividends declared on \$87,500 of stock, at 5 per cent. per annum.....	4,812 50
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Balance.....	800 71
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	\$20,444 45
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COST OF THE OHIO CANALS, ETC.

The report of the Board of Public Works—then consisting of Leander Ransom, Rhodolphus Dickinson, and Wm. Spencer—made to the General Assembly January 2, 1843, says (page 24, Doc. No. 36, Docs. of 1842-43.) "At the commencement of the next season's business, the following works will be finished and navigable"—and then proceeds to name the various canals, which make a system of canal navigation 767 miles in length. It is fair to presume that the items of cost furnished in that document are correct. At all events, it is fair to take the statement of the Board in this particular; and as it is the only document I can find in which the cost of the canals is specifically set forth, I adopt their figures as facts. On page 24 the cost, in the aggregate, of the several canals is set down at \$14,627,549 79. On pages 7 and 27 of the same report the cost of each work, with one exception, is given as follows:

ITEMS.	COST.
31 Ohio Canal.....	\$4,695,293 69
261 Miami and Erie Canals.....	6,808,800 39
91 Muskingum Improvement.....	1,582,459 04
66 Hocking Canal.....	940,359 76
25 Walhonding Canal.....	600,727 01
767 Total Cost, Ohio Canals.....	\$14,627,549 79

The Miami and Erie Canal comprises the Miami Canal, (which includes the Warren County Canal) the cost of which \$861,473 52, is included above, and the Miami Extension (costing \$3,112,953 63) and the Wabash and Erie Canal (costing \$2,834,373 14.)

The annual interest on the original cost of these works, at 6 per cent., is \$877,652 98; and for the sixteen years succeeding the date of the Report, that is to January 2, 1859, the interest amounts to \$14,042,447 68.

Prior to 1833, in the case of the Ohio Canal, the costs of repair were added to the cost of construction. Since that year they have formed a separate item in the canal accounts of the different departments.

They have been, on the several canals, up to the 15th of November, 1858, as follows:

On the Ohio Canal.....	\$3,173,523 52
" Miami Canal.....	2,836,472 29
" Muskingum Improvement.....	509,057 27
" Hocking Canal.....	206,763 77
" Walhonding Canal	29,931 16

Cost of repairs.....	\$6,755,688 01
To which should be added salaries and expenses of the Board of Public works, (which in previous years, were included in costs of repairs, etc.,) for 1856, '57, '58....	26,835 14

Total cost of repairs.....	\$6,782,523 15
Total cost of construction.....	14,627,549 79

Entire cost.....\$21,410,075 94

A tabular statement, compiled from official sources, showing the net amount paid into the State Treasury, the excess of expenditures for repairs, etc., and the balance of revenue applicable to the payment of interest, derived from the Canals of Ohio, from the year 1827 to the year 1858, inclusive, in the separate divisions of the canals and in the aggregate:

Years.	Net am't of Canal rec'ds paid into the State Treasury.	Excess of Expend'ts for repairs, etc., over payments in Treasury.	Bal. Canal. rev. applicable to pay. interest after deducting cost repairs.
OHIO CANAL.			
'27-'56....	\$7,403,530 10		\$4,475,135 62
1857....	144,733 26		31,278 69
1858....	101,616 59	\$29,767 88	
Total.....	\$7,650,169 95	\$29,767 88	
	Deduct excess of expenditures.....	29,767 88	
			\$4,506,414 31
	True balance applicable to payment of interest.....		\$4,476,646 43

MIAMI AND ERIE CANAL.			
'28-'55....	\$4,028,354 78		\$1,787,559 92
1856....	186,399 06	\$77,890 31	
1857....	138,344 65	30,157 28	
1858....	146,969 27	15,916 86	
Total.....	\$4,500,667 76	123,964 45	1,787,559 92
			123,964 44

True balance applicable to payment of interest.....	\$1,663,595 47
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MUSKINGUM IMPROVEMENT.			
'40-'54....	\$420,723 26	\$3,967 33	
1855....	21,396 71		\$1,193 83
1856....	19,232 65	11,185 21	
1857....	15,097 52	4,997 47	
1858....	17,308 88	5,039 07	
Total.....	\$493,759 02	24,492 08	9,193 83
	Deduct revenue.....	9,193 83	
Excess of expenditure.....	\$15,298 25		

HOCKING CANAL.			
'40-'54....	\$100,743 31	\$3,422 60	
1855....	16,296 67		\$9,990 58
1856....	10,123 40	31,868 81	
1857....	16,346 74	13,106 15	
1858....	16,671 61	8,116 16	
Total.....	\$160,181 73	\$55,512 52	\$9,990 58
	Deduct revenue.....	9,990 58	
Excess of expenditure.....	\$46,522 04		

WALHONDING CANAL.			
'42-'56....	\$18,935 14	\$9,213 13	
1857....	200 00	1,061 19	\$ 19 80
1858....	406 50		256 40
1857....	256 40		297 26
1858....	472 26		
Total.....	\$20,230 30	\$10,274 32	\$573 46
	Deduct revenue.....	573 46	
Excess of expenditure.....	\$9,700 86		

RECAPITULATION.			
O. Canal.....	\$7,650,169 95	\$4,476,646 47	
M. & E.	4,500,667 76	1,662,595 73	
M. Imp.....	493,759 02	\$15,298 25	
H. Canal.....	160,181 73	46,522 04	
Walhond'g ..	20,230 30	9,700 86	
Total.....	\$12,824,408 76	71,521 15	6,140,241 90
	Deduct ex. of exp. over payments in treas....	71,521 15	

Net balance Canal Revenue applicable to payment of interest.....	\$6,068,720 75
Statement exhibiting the amount received from the sales of Canal Lands granted by Congress, drawn from official reports of receivers, made to the Auditor of State's Office, embracing the amounts received from the first sale in 1829 up to February, 1859:	
MIAMI CANAL LANDS.	
Sold at Piqua.....	\$365,122 60
Sold at Lima and Defiance.....	227,545 63
Total.....	592,668 23

WABASH AND ERIE CANAL LANDS.	
Sold at Perrysburg.....	\$241,706 15
Sold at Lima and Defiance.....	296,837 62
Total.....	538,543 77

OHIO CANAL LANDS.			
Sold at Piqua, Lima and Defiance.....	\$280,006 89		
Sold at Tiffin.....	340,764 62		
Sold at Maumee City.....	1,800 00		
Total.....	622,571 51		

RECAPITULATION.			
Miami Canal Lands.....	\$592,668 23		
Wabash and Erie Canal Lands.....	538,543 77		
Ohio Canal Lands.....	622,571 51		
Total amount of sales of lands.....	\$1,753,783 51		

Recapitulations and general results of foregoing tables:			
Original cost of construction.....	\$14,627,549 79		
Cost of repairs.....	6,782,523 15		
Total cost to Nov. 15, 1858.....	\$21,410,075 94		

The O. Canal has cost, exclusive of repairs.....	4,695,293 69
" " " yielded in 32 years a revenue for interest.....	4,746,646 43
The Miami and Erie Canal has cost, exclusive of repairs.....	6,808,800 29
The Miami and Erie Canal has yielded in 31 years a revenue for interest.....	1,663,595 47
The Muskingum Improvement has cost, exclusive of repairs.....	1,582,459 09
The Muskingum Improvement has sunk in 19 years all revenue, and cost the State.....	15,298 25
The Hocking Canal has cost, exclusive of repairs.....	940,359 76

The Hocking Canal has sunk in 19 years all revenue, and cost the State.....	46,522 04
The Walhonding Canal has cost, exclusive of repairs.....	600,727 01
The Walhonding Canal has sunk in 17 years all revenue, and cost the State.....	9,700 86
Interest on cost of construction since 1843, at six per cent., is.....	14,042,447 68
Revenue from Canals applicable to interest.....	\$6,668,720 75
Revenue from sale of Canal Lands.....	1,753,783 51
	\$7,822,504 26

Dif. of Int. paid and Rev. received.....\$6,219,943 42

A statement of the amount of Canal, State and Canal, and State taxes, paid by the several counties of Ohio, during the years 1826 to 1858 inclusive, exhibiting the amount of each class of taxes paid by counties through which Canals run, and by those having no Canals, reduced from a statement made under direction of the Senate by the Auditor of State's Office:

CANAL TAX.			
Years.	Amount paid by Counties having Canals.	Years.	Amount paid by Counties having no Canals.
1826.....	\$13,076 70	1826.....	\$14,291 30
1827.....	43,384 85	1827.....	42,774 20
1828.....	44,779 24	1828.....	43,678 40
1829.....	46,008 84	1829.....	44,623 49
1830.....	61,151 97	1830.....	61,268 98
1831.....	66,886 51	1831.....	69,353 08
1832.....	72,260 45	1832.....	69,299 05
1833.....	56,163 71	1833.....	54,409 22
1834.....	18,818 80	1834.....	19,524 67
1835.....	11,464 45	1835.....	11,478 57
1836.....	47,848 36	1836.....	43,949 22
	481,953 78		474,840 59

STATE AND CANAL.			
1837.....	\$155,696 00	1837.....	\$148,655 71
1838.....	220,817 13	1838.....	221,241 06
1839.....	268,978 74	1839.....	275,176 11
1840.....	283,270 77	1840.....	279,143 12
1841.....	224,064 89	1841.....	318,088 69
1842.....	335,445 13	1842.....	355,313 22
1843.....	472,278 94	1843.....	456,600 24
1844.....	480,037 27	1844.....	470,959 38
1845.....	512,921 78	1845.....	493,969 42
	2,963,610 65		2,979,747 95

STATE TAXES FOR ALL PURPOSES.			
1846.....	\$618,367 71	1846.....	\$577,855 02
1847.....	564,841 69	1847.....	551,886 86
1848.....	629,904 23	1848.....	926,907 37
1849.....	648,291 08	1849.....	642,623 30
1850.....	699,852 00	1850.....	702,217 92
1851.....	810,017 55	1851.....	811,210 74
1852.....	909,965 97	1852.....	866,550 72
1853.....	1,546,756 16	1853.....	1,478,564 69
1854.....	1,578,818 98	1854.....	1,498,862 41
1855.....	1,413,097 05	1855.....	1,338,967 48
1856.....	1,341,279 56	1856.....	1,284,853 37
1857.....	1,340,743 36	1857.....	1,268,641 58
1858.....	1,529,471 05	1858.....	1,448,630 46
	\$13,631,416 99		\$13,097,711 75
Total.....	17,675,981 42		16,552,300 29

RAILROADS OF NEW YORK.

We have prepared the following summary of the State Engineer's Report, not having room for the report entire:

The following abstract of the Reports of the Railroad Companies for the year ending September 30, 1858, show the general condition of the Railroads:

STOCK AND DEBTS.	
Amount of capital stock as per charter and acts of the Legislature.....	\$91,575,600 00
Amount of capital stock subscribed for.....	79,730,160 98
Amount of capital stock paid in, as by last report.....	73,614,321 93
Amount of capital stock now paid in.....	74,634,965 76
Amount of funded debt as by last report.....	64,248,775 40
Amount now of funded debt.....	71,780,588 93
Amount of floating debt as by last report.....	4,519,669 26
Amount now of floating debt.....	2,846,766 07
Total amount now of funded and floating debt.....	74,627,355 05
COST OF CONSTRUCTION AND OF EQUIPMENT.	
For graduation and masonry.....	\$58,355,306 85
For bridges.....	2,396,300 42
For superstructure, including iron.....	28,165,443 55
For passenger and freight stations, buildings and fixtures.....	4,777,786 65

For engine and car houses, machine shops, machinery and fixtures.....	1,920,498 40
For land, land damages, and fences.....	9,047,417 34
For locomotives and fixtures, and snow plows.....	6,884,506 70
For passenger and baggage cars.....	2,670,391 01
For freight and other cars.....	5,586,736 19
For engineering and agencies.....	12,162,948 10
Total cost of construction and equipment.....	131,007,445 21
Total cost of same, excluding city roads.....	126,873,010 70

CHARACTERISTICS.

Length of roads in miles.....	3,124.71
Length of roads laid.....	2,442.91
Length of roads in operation, excluding city roads.....	2,797.62
Length of double track, including sidings.....	970.48
Length of branches owned by company and laid.....	3 3.44
Length of double track on same.....	6.37
Length of equivalent single track, exclusive of city roads.....	3,709.08
Number of engine houses and shops.....	183
Number of engines.....	738
Number of first class passenger cars, rated as eight wheeled.....	1,071
Number of second class and emigrant cars.....	175
Number of baggage, mail and express cars.....	239
Number of freight cars.....	9,014

EXCLUDING CITY ROADS.

Average rate of speed of ordinary passenger trains, including stops.....	20.72
Average rate of same while in motion.....	25.23
Average rate of speed of express passenger trains including stops.....	25.44
Average rate of same when in motion.....	29.39
Average rate of speed of freight trains, including stops.....	10.69
Average rate of same when in motion.....	13.95
Average weight in tons of passenger trains, exclusive of passengers and baggage.....	73.09
Average weight in tons of freight trains, exclusive of freight.....	129.27

BUSINESS OF THE YEAR.

Passenger Transportation.

Miles run by passenger trains.....	11,578 745
The same, excluding city roads.....	6,145,862
Number of passengers of all classes carried in cars.....	43,786,579
The same, excluding city roads.....	11,250,073
Number of miles traveled by passengers, or number of passengers carried one mile—city roads not included.....	373,159,179

FREIGHT TRANSPORTATION.

Miles run by freight trains.....	5,417,456
Number of tons carried in freight trains.....	3,473,725
Total movement of freight, or number of tons carried one mile.....	420,604,609

CLASSIFICATION OF FREIGHT.

Products of the Forest.....	303,236
Products of Animals.....	734,995
Vegetable Food.....	914,206
Other Agricultural Products.....	77,174
Manufactures.....	325,596
Merchandise.....	562,378
Other Articles.....	556,140

Total tonnage..... 3,473,725

EARNINGS.

From passenger business.....	\$9,016,747 50
The same, exclusive of city roads.....	7,339,922 21
From freight business, city roads excluded.....	10,532,714 97
From other sources.....	759,391 38
The same, excluding city roads.....	741,849 67

Total earnings of all roads..... \$30,309,053 85

The same, excluding city roads.....	\$18,664,486 25
Payment for transportation expenses.....	\$12,530,526 87
The same, excluding city roads.....	11,817,780 09
Payments for interest.....	4,156,997 05
The same, excluding city roads.....	4,124,359 87
Payments for dividends on stock.....	2,503,013 93
The same, excluding city roads.....	2,158,413 93
Amount carried to surplus fund.....	218,541 42
The same, excluding city roads.....	185,215 77

Total payments for all roads..... \$19,709,079 27

The same, excluding city roads..... \$18,285,778 66

ACCIDENTS.

Number of passengers killed.....	20
Number of passengers injured.....	142
Number of employees killed.....	29
Number of employees injured.....	24
Number of others killed.....	68
Number of others injured.....	63
Total number killed.....	117
Total number injured.....	202
Total number killed, excluding city roads.....	114
Total number injured, excluding city roads.....	191

DEDUCTIONS FROM THE FOREGOING RESULTS.

Amount of Stock paid in.....	\$74,634,956 76
Amount of funded and floating debt.....	71,627,355 05
Total amount of Stock and Debts.....	146,262,311 81
Excess of Stock above Debts.....	7,601 71

This sum \$149,262,311 81, of total stock and debts of all the Railroad Companies is 10.624 per cent. of \$1,404,907,679, the total assessed valuation of all the real and personal property of the State. That is, more than one-tenth of the whole valuation of the property of this State has been invested in her railroads.

If we exclude the City Roads, we deduce the following results:

Dividing \$136,873,010 70, total cost of construction and equipment, by 2,397.62, the length in miles of road, we have \$52,916 23 for the average cost per mile of roads.

If we divide by 3,709.08, the length of equivalent single track, we find \$34,206 05 for the average cost per mile of single track.

Dividing 373,159,179, the total mileage of the passengers, by 11,250,073, the number of passengers, we have 33.17 for the average number of miles traveled by each passenger.

Dividing 373,159,179 by 6,145,862, the number of miles run by passenger trains, we have 60.72 for the average number of passengers in each train.

Dividing the total mileage of freight, 420,604,609 by 3,473,725, the number of tons of freight, we have 120.91 for the average distance each ton was transported.

Dividing 420,604,609 by 5,417,456, the number of miles run by freight trains, we find 77.54 for the average number of tons of each freight train.

Dividing 6,145,862, the miles run by passenger trains, by 3,709.08, the length of equivalent single track, we find that the entire movement of passenger trains is equivalent to passing over the entire single track 1,657 times.

Dividing 5,417,456, the miles run by freight trains, by 3,709.08, we find that the entire movement of freight trains is equivalent to passing over the entire single track 1,461 times. Hence passenger and freight trains together have passed, in the aggregate, over the entire single track of all the roads, 3,118 times.

If we divide 3,117.56 by 365 we shall find that the average number of trains passing daily over the track is 8.54. That is, an average of about 8½ trains daily.

AVERAGE COST PER MILE OF ROAD.

For maintaining of roadway.....	\$1,511 70
For repairs of machinery.....	92 47
For operating road.....	2,415 49

AVERAGE COST PER MILE OF SINGLE TRACK.

For maintaining of roadway.....	\$677 19
For repairs of machinery.....	577 54
For operating road.....	1,561 42

Divided at \$7,389,922 21, the total earnings for passenger business, by 373,159,179, the mileage of passengers, we find that the average amount received for carrying one passenger one mile was 1-98 cents.

Dividing \$10,532,714 97, the total freight earnings, by 420,604,609, the total movement of freight, we find that the average amount received for transporting one ten mile was 2-504 cents.

Dividing 373,159,179, the mileage of passengers, by 20, the number of passengers killed, we find that only one passenger was killed for 18,657,959 miles of travel. To travel this distance it would require more than 100 years, moving incessantly at the rate of twenty miles per hour.

Dividing 373,159,179 by 162, the total number of passengers killed or injured, we find 2,303,452 miles of travel for each passenger either killed or injured.

The total number of passengers carried during the year, excluding City Roads, is 11,250,073, which divided by 20 gives 562,504.

That is, only one passenger has been killed for every 562,504 which have been carried.

From this, we see how small the risk of life, arising from Railroad travel.

It is worthy of note, that during the year three-fourths of all the passengers killed were comprised in two accidents only—the one at Sanquoit Bridge, on the New York Central Road, where nine were killed; the other at Shin Hollow, on the New York and Erie Road, where six were killed.

Dividing 73.09, the average weight in tons of a passenger train, exclusive of passengers and baggage by 60.72, the average number of passengers in each train, we have 1.23 tons for the amount of dead weight moved, for each passenger carried.

Dividing 129.27, the average weight in tons of a freight train, exclusive of the freight, by 77.54, the average number of tons in each train, we have 1.67 tons. That is, 1½ tons of dead weight is moved for each ton of freight transported.

Dividing \$11,817,789 09, the total amount charged to the transportation expenses, by \$18,664,486 25, the total amount of earnings, we find that the average expenses is 63.32 per cent. of all the earnings.

TEHUANTEPEC RAILROAD.

At a meeting of the New Orleans Chamber of Commerce, held on Monday, the 10th January, 1859, says *De Bow's Review*, the following preamble and resolutions were unanimously adopted:

WHEREAS, The Louisiana Tehuantepec Company, a corporation established in the city of New Orleans, for the purpose of opening the transit across the Isthmus of that name, and thus shortening by one-third the distance to our Pacific possessions, has gone into active operation, and demonstrated by several successful trips the unquestionable superiority and advantages of their route; and,

WHEREAS, Said Company is the undisputed possessor of a valuable grant from the Mexican Government, comprising the extensive right of way across the Isthmus, and the exclusive right to navigate the Coatzacoalcas river, in the maintenance of which privileges they are guaranteed by treaty between the United States and Mexico; and,

WHEREAS, The opening of this inter-oceanic transit, and its speedy development and improvement, must be of lasting importance, not only to the city of New Orleans and the State of Louisiana, but to the entire Union; therefore,

Be it unanimously resolved by the Chamber of Commerce of the City of New Orleans, That the opening of the Tehuantepec route is an enterprise which commends itself in every respect to the fostering care and support of this community. That no other undertaking is fraught with such important consequences to our people, and that in view of the vast results that must follow from the control of a thoroughfare which is inevitably destined to supercede all other routes, to the middle of the Northern Pacific, it becomes a duty of every citizen of New Orleans to extend such liberal aid to the company as will enable it to develop in a still more striking degree the advantages of the American Isthmus.

Resolved, That it is of the highest importance that this transit should be controlled by the capital, the energy, and intelligence of New Orleans, as being the nearest and most natural starting point to the Isthmus.

Resolved, That while discarding all selfish and sectional considerations, as unworthy of an enterprise national in its aim, and in the advantages of which the whole civilized world is invited to participate, yet that holding the prize of pre-eminence so far as geographical position is concerned, New Orleans should struggle to retain within its grasp the legitimate influence due to a preponderating representation of the stock of the Louisiana Tehuantepec Company.

Resolved, That said company, having opened their books of subscription, with the view of immediately commencing the construction of a railroad across the Isthmus, the completion of which will reduce the voyage from here to California to ten or eleven days, thus defying all competition, the people of New Orleans be earnestly recommended in their own interest to accord substantial aid to an enterprise, which, perhaps more than any other, will redound to the credit, the greatness, and profit of our community.

Resolved, That the foregoing preamble and resolutions be published in one or more of our city papers, as the President of the Chamber deem proper.

SAMUEL H. KENNEDY, *President*.

Attest—C. J. MANSON, *Secretary*.

CLEVELAND & PITTSBURG R. R.

The eleventh annual report of the Cleveland and Pittsburg Railroad Company has just been distributed. The Directors, on assuming the management of the road at the commencement of the year, found the affairs of the Company under more than common embarrassment, and their attention was turned to measures for its extrication. Some of the debts were of a character which required immediate adjustment, and the policy of the Board has been to pay off their liabilities as rapidly as possible. This course has been pursued, notwithstanding threats of foreclosure, and confident predictions that the road would pass into the hands of the bondholders. The result has been satisfactory—back expenses have been paid up, and the mortgage interest due at the commencement of the year, has been paid as far as it has been presented, as well as the principal part of the mortgage interest for the current year.

The annual report of the General Superintendent presents the results of the working of the road during the year, from which it appears that there were:

Receipts from freight.....	\$421,749 40
Receipts from passengers.....	302,316 39
Receipts from mails, express, rents, &c.....	43,127 74
Total.....	\$772,093 53
The total cost of operation.....	439,999 88
Net earnings.....	\$332,093 65

The ratio of the cost of operation, in which is included repairs of locomotives and cars, repairs of the road and bridges, the renewal of the track, loss and damage, insurance, taxes and salaries, as well as all the other items usually comprehended in working expenses, it is thus seen, is 57 2/3 cent of the gross receipts.

The gross earnings for the year ending November 30, 1857, were.....	\$739,924 20
The expenses of operating.....	443,957 16
Net earnings.....	\$295,967 04
The increase in earnings in 1857 over those of 1856, has therefore been.....	32,169 33
The decrease in expenses.....	3,957 28
Net increase.....	\$36,126 61

The number of miles run in 1857 was 515,809. The number of miles run in 1858, was 646,413. So, that while the mileage has been increased 25 2/3 cent, the expenses of operating are slightly reduced.

During the year there has been no collision and no loss of life, or injury to passengers.

The total expenditure for the construction and equipment of the road, including payments for right of way, as appears from the books of the Company,

November 30, 1855.....	\$9,157,232 83
For telegraph line, personal property, &c.....	145,055 91

Total.....	\$9,302,288 74
Assets Beaver Co. bonds (hypothecated).....	31,000 00
Bills receivable.....	7,791 95
Massillon Bank judgment.....	52,139 00
Cash.....	12,764 27
Fuel on hand.....	9,550 62
Personal accounts.....	63,533 22

Total.....	\$176,790 07
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The following accounts are on the ledger but will be charged to other accounts when a settlement is effected with the O. L. I. and Tr. Co., and C. W. Rockwell.

Beaver Co. bonds.....	\$7,000 00
Wheeling City bonds.....	41,000 00
Alleghany Co. bonds.....	10,000 00
O. L. I. & Trust Co. account.....	124,024 00

Total.....	\$182,024 00
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Grand total.....	\$9,661,102 81
------------------	----------------

The liabilities of the Company appear as follows:

Stock.....	\$3,941,368 64
Stock Scrip and dividends.....	49,827 54
First Mortgage Bonds.....	800,000 00
Second Mortgage Bonds.....	1,189,000 00
Third Mortgage Bonds.....	1,165,000 00
River Line bonds.....	1,154,000 00
Income bonds.....	118,500 00
Dividend bonds and Scrip.....	491,825 21
Bills payable.....	653,821 53
Balance of net earnings account.....	96,759 87

Total.....	\$9,661,102 81
------------	----------------

The expenditures for all objects have been as follows:

Interest.....	\$219,757 97
Pittsburg, Ft. Wayne & Chicago lease.....	55,000 00
Bills payable, running expenses, and construction accounts for 1857, &c.....	118,076 38
Right of way.....	18,562 70
Income bonds.....	3,000 00
Alleghany Co. bonds.....	2,453 18
Cash on hand.....	12,764 27

Total.....	\$424,659 50
------------	--------------

It appears from this statement that the indebtedness of the company has been reduced, within the year, \$137,097 26.

SUBSTITUTION OF COAL FOR COKE IN LOCOMOTIVES.

(From the London Civ. Eng. and Arch. Journal, October, 1858.)

That the consumption of smoke in coal-burning locomotives may be accomplished in a satisfactory manner, was proved by experiments made some time since by Mr. Joseph Beattie, the talented manager of the London and South-western Railway Company. In this case the invention made use of has received the approval of competent judges, and it has been patented, but it is stated there is one objection to its general employment. An expenditure of about £300 is required to adapt it to any engine previously in use, and on this account its employment has been confined to the new locomotives constructed. Assuming the duration of a locomotive to be from twenty to thirty years, a long time would elapse before the entire stock of a railway company would consist of engines so contrived. The Directors of the Lancashire and Yorkshire, and East Lancashire Companies, have recently been aiming to accomplish the object by simpler and more direct means. The lines under the control of the two boards are nearly 400 miles in length, they employ about 300 locomotives, and the saving to be effected by using coal instead of coke would be at least £30,000 per annum. Mr. Jenkins and Mr.

Lees, the locomotive superintendents of the two companies, have each perfected inventions which are exceedingly simple and inexpensive. That of Mr. Lees, (of the East Lancashire) was put to the test, on the 6th ult., on the railways between Manchester and Blackpool.

The distance from Manchester to Blackpool is 48 miles, and the 96 miles of line there and back was well adapted for a fair trial of the invention. In going either way there are some severe gradients to ascend; two of them near Chorley, are as steep as 1 in 100; and there are also several sharp curves. For the purpose of the experiment, a train was composed of fourteen or fifteen wagons, loaded with old metal, two first-class carriages, and two break vans. The length of the train was 240 yards; its weight was estimated at 271 tons 15 cwt., including the engine and tender, which, when filled with coal and water, would be 41 tons 8 cwt. This is rather in excess of the average weight of ordinary luggage trains of thirty to thirty four wagons. Mr. Fothergill, C. E., of Manchester, had charge of the experiment.

One of the main tests being to ascertain the economy of consumption, it was necessary to weigh the fuel upon the tender before commencing the journey. In this was included the quantity used for getting up the steam. For the same reason, on the return of the train, it was requisite to ascertain the quantity left in the tender and unconsumed in the fire-box. By deducting the latter items it was, of course, easy to calculate the net consumption, and the cost per mile. Another important point was to see that the steam was kept as nearly as possible at an even pressure during the trip, and that to save fuel, time was not lost in ascending steep gradients. Any delay of this kind would have to be compensated by great speed on more favorable parts of the line; and such irregularities might be a fruitful source of accident if allowed in the working of the ordinary traffic.

The train left the Salford station soon after twelve o'clock; and the journey to Bolton, a distance of ten miles, and a rather heavy ascent, was made in thirty-five minutes. The distance from Bolton to Preston, 20 miles, was run in 43 minutes, and the remaining 18 miles in sixty-three minutes. The return journey occupied a much longer time, through detentions caused by trains being in the way, by rain having made the rails slippery, and other circumstances adverse to the experiment as regards economy. The results of the trip, however, were most satisfactory, the total consumption of coal being only about 39 cwt. for the whole journey. The coal used was that of the Ince-hall Company, at Wigan, costing 5s. 3d. per ton, and hence, the cost of the trip was about 10s. From experiments previously made, it appeared that with coke, which costs from 11s. to 11s. 6d. per ton, the expense of taking the train the same journey would have exceeded 20s. In two previous trials made by Mr. Fothergill—one with coal and the other with coke—over the same line, weather and circumstances being equally favorable to each, the cost was 9s. 5d. for the experiment with coal, and 22s. 3d. for that with coke. There seems to be no doubt, therefore, of the advantage of using coal in point of economy.

As regards the smoke burning apparatus, the experiment was also highly satisfactory. The great desideratum is the proper admission of atmospheric air into the fire-box, and Mr. Lees secures it in a very simple and inexpensive manner. In the lower part of the fire-box door an opening is effected by an adjustable

	Circulation.	Specie.	Loans.	Deposits.
	\$1,867,848	1,133,754	6,945,722	1,637,796
Last week...	1,937,498	1,213,572	7,001,804	1,683,030

BUSINESS OF CHICAGO FOR THE YEAR 1858.

Total number of miles of Railway centering in Chicago now completed, (Feb. 20, 1852, there were but 40 miles).....	4,560
Total number to be completed in from five to ten years.....	7,415
Total number of miles of Railway in the State of Illinois.....	2,775
Total earnings of all the Railways centering in Chicago for the year 1858.....	\$15,197,155 74
Number of trains arriving and departing daily, about.....	110
Total number of passengers carried west by four of the principal Railways.....	76,908
Number of passengers carried west more than were returned east.....	15,535
Total number moved west on the three eastern lines more than were returned east.....	48,365
Population of Chicago in 1857.....	38,783
Present Population of Chicago, estimated at no increase last year.....	130,000
Total receipts of Grain in Chicago for the year 1858, (flour being reduced to wheat)—bushels.....	24,262,685
Total shipments of Grain—(flour being reduced to wheat)—bushels.....	20,635,166
Total receipts of Wheat—(flour being reduced to wheat)—for the past year.....	13,215,878
Total shipments.....	10,909,243
Total receipts of Corn.....	8,260,033
Total shipments of Corn.....	7,493,212
No. Cattle packed in 1858.....	45,504
Average weight of Cattle packed, lbs.....	530
No. barrels of Beef packed.....	96,000
Value of Beef packed, about.....	\$1,277,536
Total receipts of live and dressed Hogs for the season of 1856-7.....	214,523
Total receipts of Salt for 1858, bbls.....	333,988
Total shipments of Salt for 1858, bbls.....	191,279
Total receipts of Lumber for the year, feet.....	273,020,506
Estimated value of Grain, Live Stock, Beef, Pork, Provisions, Grass Seeds, &c., exported for the year.....	\$19,928,495 23
Number of Vessels arriving in the Port of Chicago for the past year.....	6,754
Tonnage of same.....	1,621,960
Total amount invested in Buildings and Public Improvements for 1853.....	\$3,962,933

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READ THE FOLLOWING CERTIFICATE.

U. S. BLANK AGENCY, CINCINNATI POST-OFFICE, }
January, 1859.

This work has been carefully compiled and corrected by E. PENROSE JONES, Esq., late Assistant Post-Master of the Cincinnati P. O., from the Records in this Department, and other sources, and contains the most complete list of Post-Offices especially of the Western, North-Western, and South-Western States, yet published.

MAHLON H. MEDARY,

Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an active pamphlet of about 100 pages. The entire matter is kept standing in type, and as the compiler is promptly advised of all New Offices, Changes and Regulations of the Department, the information is corrected up to the last day of publication, an advantage possessed by no other work of the kind.

Observe, That this list is arranged by States and Counties, making it especially valuable to business men. No similar arrangement has been published since 1856. There are 3000 more offices in this than in any book heretofore issued. The Price is one-half that of any work of the kind now published.

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194 Walnut Street,
Cincinnati, Ohio.

Mar10.1f.

McCALLUM, BRISTOL & CO., BRIDGE & DEPOT BUILDERS.

McCallum, Bristol & Co., are prepared to construct McCallum's PATENT INFLEXIBLE ARCHED TRUSS BRIDGE, for Railroad and Highway purposes at any point in Ohio, Indiana, Illinois, Missouri, Iowa, Wisconsin and Minnesota on as favorable terms as any other bridge, and in the most approved and perfect manner. Parties desiring information, will please apply to the firm at their Office 99 Third St., Cincinnati, or to McCallum, Seymour & Hawley, No. 110 Broadway, N. Y. Ag. 26.

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.
SOLE IMPORTERS.

PROSSER'S PATENT SURFACE CONDENSERS for high pressure steam, with sea or other bad boiler water, gauges, 3-cutter drills, counter-sinks, tube end cutting bars, expanders, tube scalers, steel wire and whalebone brushes, pull lever wrenches, tubes—plain or enameled, screwed together for Artesian Wells, HOLLOW SLABS for various purposes, Steel for Rollers.
THOS. PROSSER & SON,
27 Jan. 28 Platt Street, New York.

LANE & BODLEY MANUFACTURERS OF WOOD WORKING MACHINERY, AND CIRCULAR SAW MILLS.

Lane & Bodley's celebrated Power Mortising Machine and all Machinery used in Rail Car Shops.

Corner John and Water Sts., CINCINNATI, O.
Jan. 5 1f.

WRIGHTSON & CO., BOOK & JOB PRINTERS, NO. 167 WALNUT STREET, CINCINNATI, O.

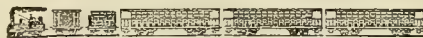
Public attention is respectfully directed to this establishment, in the assurance that ample satisfaction will be given as regards Typography, Press Work, and Charges, to those who may require Ornamental, Common, or Book Printing, Printing from Stereotype Plates. We are better prepared to do business in this line than other house in the West.

Druggists Labels.

Are printed in the neatest manner, in Gold Silver, or Copper Bronze, on Satin, Splendid Glazed Colored Papers, or Cards, unequalled for brilliancy, at very low prices.

1858 1858.

CINCINNATI AND ST. LOUIS. Through without Change of Cars, OHIO & MISSISSIPPI (BROAD GAUGE)



RAILROAD.

TWO DAILY TRAINS FOR
Louisville, Vincennes, Evansville,
Cairo, and St. Louis,
At 9:00 A. M. and 10:30 P. M.

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M.
ACCOMMODATION TRAIN at 5:20 P. M., daily, (Sundays excepted,) for Seymour.

FOR THROUGH TICKETS

To all points West and South please apply at the Union offices, No. 2 Burnet Street; south-east corner Broadway and Front street; and at the Depot, corner Front and Mill streets.

P. W. STRADER, General Ticket Agent.
Omnibuses call for passengers.

MOSELEY'S TUBULAR WROUGHT IRON



ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs, are wholly of Wrought Iron, or mixture of Wood and Iron; Sheet piling always Iron.

The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges.

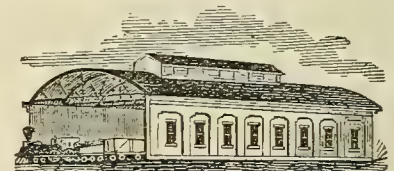
We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

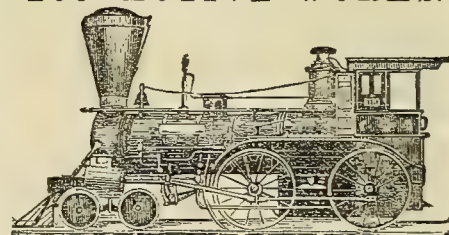
Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O.
may13. MOSELEY & CO.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20 MOORE & RICHARDSON.

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P. DUDLEY.

President of the Board.

Jan. 5 1f.

Union Works, Baltimore.**POOLE & HUNT,****Iron Founders & General Machinists,**

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

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MACHINERY of the most approved construction for Flouring and Saw Mills.

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SHAFTING, PULLIES and HANGERS.

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East Side, between Third and Fourth Streets, KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

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Locomotive Works,
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THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,**AND TENDERS, AND****RAILROAD MACHINERY**

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding the work to any part of the country, without delay.

JOHN ELLIS, Agent.
WALTER McQUEEN Sup't. Aug 15

N. B.—We have two Freight Engines on hand suitable for the 4 feet 10 in. gauge. Cylinders 16 inches diameter, 22 inches stroke. Driving wheels 4½ feet diam. December 18th, 1853.

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TURN-TABLE BUILDER.**

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address, Respectfully Yours,

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Mathematical Instrument Makers
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MANUFACTURERS OF
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**TIRES,
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ARE PREPARED TO
Execute Promptly Orders to any Extent
FOR THEIR

**CELEBRATED WHEELS,
EITHER SINGLE OR DOUBLE PLATE,
WITH OR WITHOUT AXLES.**

**WHEELS FITTED
To Hammered or Rolled Axles.**

In the best manner, at the shortest notice, and on the
Most Reasonable Terms.

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Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America, by STEPHENS & JENKINS, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:

The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater. Its welding nearer perfect, and its durability superior.

Unlike other new forms of rail, it can be put down upon the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

Reference is made to the officers of all the railroads in the vicinity of Cincinnati. Additional particulars and circulars may be had by addressing
**E. W. STEPHENS,
Cincinnati, Ohio.**

AMERICAN AND FOREIGN PATENT AGENT.

**THOMAS D. STETSON,
SOLICITOR OF PATENTS,
And Consulting Engineer,
No. 5 Tryon Row, (near City Hall) N. Y.**

Winter Arrangement.**BALTIMORE AND OHIO**

**RAILROAD.
GREAT NATIONAL ROUTE.**

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood, and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the

West, South-West and North-West.

TWO TRAINS

Leave Wheeling daily, at 12:20 P. M., and 10:26 P. M.

Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.

Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone, by other lines.

Time as quick and fare as low as via any other Route.

Inquire for tickets via the Baltimore and Ohio Railroad, at any of the principal Railroad Offices in the West.

E. F. FULLER, Gen'l Western Agent.
L. M. COLE, General Ticket Agent.
W. P. SMITH, Master Transportation.

HOYT'S WATER GAUGE

Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,
July 30 No. 66 Broadway, N. Y.

GEO. D. WINCHELL & BRO.,

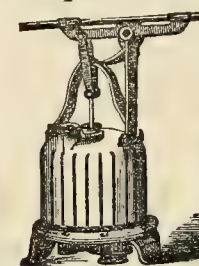
172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND
Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use, and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1853—13

ENGINEERING!!

The undersigned is prepared to furnish

SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of Steam Vessels, Engines, Boilers, Mill Work, &c. Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description,

While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN and NOYES

METALLIC SELF ADJUSTING CONICAL PACKING, DUDGON'S HYDRAULIC JACK,

Also, for Water Gauges, Indicators, Steam Whistler

CHAS. W. COPELAND,
Consulting Engineer,
64 Broadway, N. Y.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,

THEODORE DEHON,
ar Broadway, New York.

no13 10 Wal

BALTIMORE AND OHIO RAILROAD. GREAT NATIONAL ROUTE

—TO—
WASHINGTON CITY,
BALTIMORE,
PHILADELPHIA,
NEW YORK,
AND BOSTON.

THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK and BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

WASHINGTON CITY.

TWO TRAINS LEAVE CINCINNATI DAILY,
(Sundays Excepted.)

9 A. M. and 11:30 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 9 and 11:30 P. M. trains.

The above Trains arrive in Baltimore at 7:25 A. M., 5:05 P. M., in Washington 10:40 A. M., 7:05 P. M.

Inquire or Tickets via BALTIMORE & OHIO RAILROAD.

FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:30 A. M., 8:50 A. M., 3:30 P. M., and 5:30 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

FOR THROUGH TICKETS,

And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRESCOTT SMITH, Master of Transportation
Baltimore and Ohio Railroad.

L. M. COLE,
General Ticket Agent.
E. F. FULLER,
General Western Agent.

1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-18th,
Corby, Gossin & Co.'s make, for sale very
low by
TRABER & AUBERY,
7 Public Landing

LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY, NOVEMBER 29th, 1858, Trains leave Cincinnati as follows:

9 A. M. DAY EXPRESS—Stopping at Way Stations.

4:15 P. M. ACCOMMODATION—For Xenia and Springfield, stopping at intermediate stations.

11:30 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Corwin, Xenia, and London

Connections are Made by the 9 A. M., and 11:30 P. M. Trains for

ALL THE EASTERN CITIES.

The NIGHT EXPRESS Train leaving Cincinnati at 11:30 P. M., runs daily, except SATURDAYS. The other trains run daily, except SUNDAYS.

FOR THROUGH TICKETS

And all information, apply at the Offices, Walnut Street House, bet. Sixth and Seventh; No. 1 Burnet House; south-east corner of Broadway and Front streets, and at the Eastern Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Superintendent.

Omnibus calls for passengers.

WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c executed in the highest style of the art.

MIDDLETON, STROBRIDGE & CO.,
Jan 8 ly 119 Walnut st., Odd Fellows' Buildin

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about
lbs. per yard, "Erie" pattern, of best
quality Welsh make, now ready for de
livery, for sale by
March 1st-58. VOSE, LIVINGSTON & CO.,
Feb. 25, 58. 9 South William St., N. Y.

Cincinnati, Hamilton and Dayton, RAILROAD.

FOUR TRAINS
LEAVE THE SIXTH STREET DEPOT DAILY.

TRAINS RUN THROUGH TO RICHMOND, LIMA,
SANDUSKY, AND DELAWARE WITHOUT
CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND
NORTH-WESTERN CITIES.

G. A. M. MAIL TRAIN, connects at Dayton with Sandusky, Dayton and Cincinnati Road, for Springfield and Sandusky—at URBANA, for Columbus—at CLYDE, for Cleveland and Buffalo, Toledo, Detroit and Chicago, arriving at Detroit at 5:30 P. M. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Munice. Also, connects at RICHMOND with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at RICHMOND, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

S:40 A. M. TRAIN, for Cleveland and Pittsburg, via Delaware, makes close connection at CRESTLINE, for Pittsburg, Baltimore, Philadelphia, and New York; and at CLEVELAND for Dunkirk, Buffalo, Boston and New York.

4:30 P. M. TRAIN, for Springfield and Sandusky—connects at FOREST, for Chicago—at CLYDE, for Toledo—at SANDUSKY, for Cleveland and the East. Connects also at DAYTON, for Troy, Piqua, Sidney, Lima, and Chicago—at SIDNEY, for Pittsburg and the East. Also connects at RICHMOND, for Indianapolis, Terre Haute, St. Louis and Chicago.

5:40 P. M. TRAIN, for Hamilton and all way stations.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; No. 3 Burnet House; or at the Sixth Street Depot.

D. McLAREN, Superintendent.

GEO. H. KNIGHT & BROTHER,
Patent Attorneys,
N. E. Corner Vine & 4th.

A CARD.

I take pleasure in announcing that all difficulties between my former partners, in the firm of APPLEGATE & Co., and myself have been amicably adjusted. The business will be continued by them, at the old stand, they settling all the business connected with the firm.

I do not hesitate to recommend my friends to make their purchases of them, as I believe they will find it to their advantage to do so.

JOHN B. RYAN,
Late of the Firm of APPLEGATE & Co.,
Booksellers and Stationers.
Cincinnati, March 1st, 1859.

In referring to the above Card, we take the opportunity of saying to our friends and the public, that the business as heretofore conducted by us, will be continued at the same place and under the same name and style as formerly.

Our stock is very large and varied, having just been replenished for our spring sale. We are prepared to fill all orders, at lowest prices, with promptness and dispatch, guaranteeing satisfaction to all who may favor us with their orders.

We trust by continued exertions to merit a continuance of past favors.

JAMES APPLEGATE,
SAM'L FLICKINGER,
ARTHUR H. POUNSFORD.
Cincinnati, March 1st, 1859.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw and Drills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio.
LEE & LEAVIT

GENERAL RAILWAY SUPPLY AGENCY.

SNOOK & HILL'S PATENT

LOCOMOTIVE LAMPS.

83 Liberty Street, Cor. of Broadway,
NEW YORK.

JOHN W. KELLY
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

RAILROAD ENGINES & CARS,

ALSO AGENT FOR THE SALE OF

HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,

JUDSON'S GOVERNOR VALVE.

Orders solicited and promptly filled.

The Railroad Record.

E. D. MANSFIELD, - - - - { Editors.
T. WRIGHTSON, - - - - }

CINCINNATI:

Thursday Morning, March 17, 1859.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.	
One square, single insertion,.....	\$1 00
“ “ per month,.....	3 00
“ “ six months,.....	12 00
“ “ per annum,.....	20 00
“ column, single insertion,.....	5 00
“ “ per month,.....	10 00
“ “ six months,.....	40 00
“ “ per annum,.....	80 00
“ page, single insertion,.....	15 00
“ “ per month,.....	25 00
“ “ six months,.....	110 00
“ “ per annum,.....	200 00
Cards not exceeding four lines, \$5.00 per annum.	

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

Railroad Presidents, Superintendents and Secretaries, are requested to send us copies of all Annual and other Reports they may issue, together with their Monthly Statements, and such other matters of interest as they may be willing to furnish us

To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

The following shows the earnings of the North Pennsylvania Railroad during the month of February, 1859..... \$22,588 19
Same time last year..... 18,901 51

Increase..... \$3,686 08

In three months ending Feb. 28..... \$70,720 25
To same date last year..... 59,714 45

Increase..... \$11,005 80

Under the head of railroad troubles, the *Cleveland Herald* states that the Cleveland and Toledo Railroad Company have commenced several suits against the Cleveland and Erie Railroad Company, for diverting freight consigned and belonging to the Cleveland and Toledo Company, and sending it over the C., C. and C. R. R.

The coal tonnage over the Huntingdon and Broad Top Railroad for the week ending the 10th inst., was 2,259 tons, and for the season to the same time, 23,362, being an increase over last year's tonnage to the same time, of 14,270 tons. The increase of tonnage by the three lines named, is 131,709 tons.

STATISTICS OF CUBA.

The Bill, which was recently introduced into the Senate of the United States, by Mr. SHELLE, for the purpose of purchasing or attempting to purchase Cuba, has failed. It will probably be many years before that Island will become a part of the United States. Yet, such is the natural progress of a great country in absorbing neighboring territory, that, in all probability, Cuba will, at some time, be engrafted in the United States. Its commerce nearly all belongs to the United States now. Some statistics of that country may, therefore, be interesting.

The Island is, following the curve, about 800 miles long, and from 25 to 130 in breadth. It contains about 43,000 square miles—a little more than the State of Ohio.

POPULATION.—There have been four regular censuses of the population: the first in 1775, when it amounted to 170,370; the second in 1791, when it was 272,140; the third in 1817, when it was 551,998, and with transient persons, 630,980; and the fourth in 1827, when the permanent population was 704,487, and with transient persons, 730,562. A fifth census is now (1839) in progress, when it is supposed that the gross numbers will exceed 900,000. According to the census of 1827, the population is divided as follows:

	Males.	Females.	Total.
Whites.....	168,653	142,398	311,051
Free people of color.....	28,058	29,456	57,514
Free Negroes.....	23,904	25,070	48,980
Negro and colored slaves.....	183,290	103,652	286,942
Total.....	403,905	300,582	704,487

EDUCATION is at a very low ebb: in the whole Island there are only 222 schools. Of these, 129 are for white boys, and 79 for white girls; 6 for colored boys, and 8 for colored girls. They are attended by 6025 white boys, 2417 white girls; 460 colored boys, and 180 colored girls. The proportion of free children between 5 and 15 years of age at school, to those not at school, is supposed to be about 1 to 10! There is not in the entire province of Puerto Principe, a single school for free colored children of either sex; and it is needless to add that they are inadmissible at the white schools. Of those who pay for their own education, there are 3255 white boys, 1557 white girls; 371 colored boys, and 142 colored girls. Of those taught gratuitously by the masters, there are 672 white boys, 363 white girls; 71 colored boys, and 28 colored girls. Of those who have the expense of their education defrayed by patriotic societies, there are 340 white boys, and 200 white girls. Of those educated by public subscription or by local taxation, there are 1758 white boys, 297 white girls; 18 colored boys, and 10 colored girls.

Since the last of these censuses, two others have been taken. In 1851, the census made Cuba to contain, of all colors, about 1,100,000 people. In connection with this, the following

is given as the population of the West Indies:

Population of the West Indies, as stated in Colton's Atlas of the World, vol. 1.

Hayti—Haytien Empire.....	572,000
Dominican Republic.....	136,000
Cuba, (slaves 330,425).....	1,009,680
Porto Rico.....	447,914
French Islands—Guadaloupe and dependencies.....	154,975
Martinique.....	121,478
French Guinea.....	22,110
St. Bartholomew.....	9,000
Danish Islands—St. Thomas.....	13,666
Santa Cruz.....	23,729
St. John.....	2,328
Dutch Islands—Curacao, etc.....	39,623
Dutch Guiana.....	28,497
British Islands—Bahamas.....	27,510
Turk's Island.....	4,428
Jamaica.....	377,433
Caymans.....	1,760
Trinidad.....	68,645
Tobago.....	13,208
Granada.....	32,671
St. Vincent.....	30,128
Barbadoes.....	135,939
St. Lucia.....	24,516
Dominica.....	22,061
Montserrat.....	7,653
Antigua.....	37,757
St. Christopher's.....	23,177
Nevis.....	9,601
Barbuda.....	1,707
Anguilla.....	3,052
Virgin Islands.....	6,649
British Guiana.....	127,695
Total.....	3,575,376

The cultivation of Sugar and Coffee has increased at such a rapid rate, that there is a great demand for labor. In consequence of this, there has been an importation of Asiatics. The following Table is given:

Table of Number of Chinese shipped from China from 1847 to March 23, 1858.

The following table, derived from a reliable source, exhibits the total number of vessels that have arrived at this port since 1847 with Asiatics; their flags, tonnage, number of Asiatics shipped and landed, number and per centage of deaths, etc., which, we think, will not be deemed uninteresting:

Flags of Vessels.	Numbers.	Tonnage.	Asiatics, number shipped.	Landed.	Deaths.	Per centage of deaths.
American.....	13	13,545	6,744	5,929	815	12
British.....	29	21,275	10,791	9,265	1,586	14
Dutch.....	8	5,603	2,773	2,463	310	11
French.....	7	6,037	3,655	3,154	501	13
Spanish.....	5	2,038	1,779	1,489	290	11
Portuguese.....	3	1,240	1,049	1,021	28	2
Peruvian.....	3	2,444	1,314	812	562	38
Bremen.....	1	500	249	276	13	5
Norwegian.....	1	470	221	159	42	19
Chilean.....	1	250	202	145	47	23
Total.....	71	53,208	28,777	24,643	4,134	14

From the foregoing it will be seen that the loss of life on the total number shipped actually amounts to 14 $\frac{1}{2}$ per cent.; and whilst the number of deaths of those brought hither in Portuguese ships amounts to only 2 $\frac{1}{2}$ per cent., the number brought in American ships amounts to 12 per cent., in British ships to 14 $\frac{1}{2}$ per cent., and in French ships to 13 $\frac{1}{2}$ per cent.; whilst in Peruvian ships the number of deaths amount to 38 $\frac{1}{2}$ per cent.

With the increase of Coffee, Sugar, and population, has also come the increase of commerce. A very large portion of this commerce is with the United States, and is constantly increasing.

Countries.	1852.		1853.		1854.	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
Spain.....	\$10,910,429	\$3,882,634	\$7,766,945	\$3,208,871	\$9,057,438	\$3,615,692
United States.....	12,076,408	6,799,732	6,799,732	12,131,195	7,897,640	11,641,113
England.....	5,652,855	5,486,677	6,192,992	8,382,195	6,610,909	11,119,325
France.....	2,913,354	2,513,164	2,177,822	3,293,389	2,510,909	1,031,767
Germany.....	1,102,002	1,690,105	1,115,940	1,474,018	1,429,619	1,424,074
Belgium.....	493,908	321,200	908,511	466,306	633,868	811,860
Spainish America.....	2,144,018	801,160	1,677,476	514,831	671,380	14,186
Portugal and Brazil.....	953,586	297,132	86,876	216,661	16,245	231,482
Holland.....	657,244	804,306	485,492	403,085	194,306	309,949
Denmark.....	27,783	483,218	47,756	223,698	538,834	
Russia.....	27,783	15,480	47,756	16,309	14,076	53,694
Sweden and Norway.....	39,300	241,452	69,092	139,076	168,453	
Austria.....	483,466	380,586	377,011	651,275	310,865	313,779
Italy.....						
Deposits.....						
Total.....	\$29,781,212	\$27,453,356	\$27,760,800	\$31,210,405	\$31,394,578	\$32,083,731
Add for Peninsular.....						\$5,958

* From Ex. Doc. No. 107, First Session Thirty-fourth Congress, Commercial Relations of the United States.

But the commerce of Cuba with the United States in 1857-'58, was:

Exports to the United States..... \$27,214,846
Imports from the United States..... 14,633,191

The aggregate of Cuban commerce with the United States was nearly double what it was in 1854. Nearly all the valuable commerce of Cuba is now enjoyed by the United States.

GRAND RAPIDS AND INDIANA R. R. COMPANY.

We have referred to this Road on former occasions, as one of the most important new works in the North-west. It is the main part of the great line which is to connect Cincinnati with the Straits of Mackinaw, and to open up the whole interior of Michigan to the commerce of Cincinnati. It is one of the three lines which have received, by Acts of the Michigan Legislature, the aid of the lands granted by the General Government to the Railroads of Michigan. The original corporations in Michigan and Indiana, were consolidated and merged into one in 1857, whose corporate franchise extended from the City of Fort Wayne, (Ind.), to the Straits of Mackinaw. In the distribution of the Land Grant, a proportion equivalent to the distance was conferred upon this Company. The portion of road to which it was applied, extends from Grand Rapids to Little Traverse Bay; the

precise length of which, adopted by the Land Department, Washington, was 182 miles 3 067; and the quantity of Land given about 674,164 acres. This land is valued by the Company at from \$4 to \$10 00 per acre. But, as it lies on the line of the road mostly, it will be entirely safe to say, that the grant is fully worth *three millions of dollars*.

On the supposition, which is probably true, that this whole road will cost *nine or ten millions of dollars*, yet, it appears certain, that the work has *one-third* its entire cost given to it out and out. Can it be possible, then, that the road, when made, will not be worth *two-thirds* its cost, after allowing the utmost for that cost? We think there can be no doubt, that, with our present experience in the art and hazards of road making, no such doubt or danger need be apprehended, as have existed with many roads heretofore constructed. With accurate estimates, and a grant of one-third the cost to begin with, there need be no hazard or failure. We are certain on this point, as for three hundred miles there will be a new and rich country brought into immediate contact with Cincinnati. The result will be rapid settlement, great business, and a new creation of commerce.

The measured length of the road is as follows:

From Fort Wayne to Sturgis 54 1/2 miles.
From Sturgis to Grand Rapids..... 81 1/2 "
From Grand Rapids to Traverse Bay..... 182 1/2 "
From Traverse Bay to Mackinaw..... 27 "

The act of the Michigan Legislature gives one hundred and twenty sections (76,800 acres) on the completion of each twenty miles; that is, six sections (3,840 acres,) on each mile.

All taxes have been remitted for seven years; so that this work commences under the most favorable circumstances possible.

Speaking of the land granted, Mr. SOMON, President, says:

The lands conferred upon the Company are generally *timbered farm lands*—of the best quality, in timber, soil and water. Some are *pine lands*; some *pine and hard wood mixed*; and a small portion are *cedar swamp lands*. But there is none too much of either description for the value of the lands and the prosperity of the country. Nature has distributed and interspersed them in such proportions as will best contribute to the support of a populous and well improved agricultural country. The great bulk of these lands are what are generally denominated "*beech and sugar tree lands*." The soil is generally a rich sandy loam. The estimated value of the lands, when the road is completed, has been put, by different parties, from \$4 to \$10 per acre.

Both the General and the State Governments confer the *right of way* upon the Company, under certain regulations, over their respective lands.

The line of the road, as surveyed and located, has been adopted by the Commissioner of the General Land Office, and the Secretary of the Interior, as the basis on which the lands are set apart to this Company.

The odd numbered sections, outside of the *six miles limit*, and within the *fifteen miles limit*, are set apart to this Company, out of

which to select lands to make up any deficit that may occur in the *six miles*.

The most of the lands granted are now selected, and as soon as the list is corrected at the Land Offices, they will be "*certified*" to the Company.

The work of construction, now performed, is mostly between Wolcottville and Kalamazoo. Between La Grange and Sturgis the earth work and bridges are nearly done—\$1,500 will complete it for the ties. About one-fourth of the earth work, bridges and ties, of the remainder of the line from Wolcottville to Kalamazoo, is done. Between Kalamazoo and Grand Rapids, work to the amount of about \$8,000 has been done.

From Wolcottville to Laphamville, a distance of 149 miles, a great portion of the *right of way* has been donated to the Company. The amount paid for right of way is \$7,732 36. It is estimated that a similar sum will pay all that will be required for the balance of this 149 miles.

A very considerable amount of means and time had necessarily to be expended in the engineering service and other matters pertaining to the line north of Grand Rapids, and the land grant.

The total amount of subscriptions made to the Capital stock of the Company, is..... \$791,585 00
From which have been collected..... 216,316 18

Amount of subscriptions not collected..... \$575,268 82

The depression in the general finances of the country has caused some delay in the work. But now arrangements are made which it is believed, will steadily carry the work on to a final completion.

The connections of this road will all be of the most advantageous character. At Fort Wayne, connections are made with running roads to all parts of the West, South and East. Going north, it crosses the "*Air Line*," Michigan Southern, Michigan Central, Detroit and Milwaukee, and the Flint and Pierre Marquette Railroads, *all at right angles*. This kind of connections will keep this road from being in an unprofitable competition with others. They will mutually contribute to the business of each other.

The amount of means collected and expended in prosecuting the construction, the engineering and other business of the Company, amounts to the sum of \$216,316 18. The single item of engineering performed by the Company, amounts to the sum of \$42,634 32.

The whole country along the line of the Road, from Fort Wayne to the Straits of Mackinaw, has been thoroughly reconnoitered and surveyed by the Company's engineers.

We presume the Company will be ready to recommence active operations in this Spring; and that they will need a Company of contractors who have some means and integrity, as well as enterprise. The road can afford good terms to such men, and it opens a fair field of productive enterprise.

The anthracite coal trade is good for the season. The Reading Railroad brought down for the week ending on Thursday last 26,512 tons, and for the season, 349,419 tons, against 269,349 tons to the same time last year, being an increase of 80,070 tons.

The Sussex Register says: "It is understood that the Morris and Essex Railroad will be immediately extended from its present terminus at Hacketstown to Phillipsburg, opposite Easton."

KENNEDY'S PATENT TANNERY.—HIDE MILL AND WASHING MACHINE.



The art of tanning, is that by which animal skins are converted into leather, a product differing entirely from that of the raw material, and adapting it to the useful purpose for which it is employed. The properties imparted are of a physical nature, and vary with the kind of skin employed, and the modifications of the process which it undergoes. Chemically considered, however, leather is a definite compound of tannin and gelatine. Tanning, as an art, dates as far back as nine hundred years before the Christian Era. The methods resorted to in early times, consisted of little more than merely cleansing and drying the skins, and thus prepared, the latter were used for clothing. Leather was largely in use among the ancient Egyptians, and the workers of that material were so numerous, that the Memnonian quarter of Thebes was characterized as their especial locality. Their skill in fashioning it was so great that ornaments of all shapes and devices were made from it. Leather was made by them into tapestry, and many of the Egyptian tombs bear representations of artificers in leather, engaged in the several branches of their vocation.

The principal steps, however, in the manufacture of leather, are the washing and soaking for the purpose of cleaning and softening the skins and preparing them for the removal of the hair; and to prepare the raw hides for the action of the tanning materials, it is necessary to subject them to several preliminary operations. The washing, soaking and softening is the first operation they must undergo, and therefore we would highly recommend Mr. D. H. Kennedy's improved machinery, which is best adapted for that purpose. (The Hide Mill.) This machine is employed for the purpose of softening and washing the filthy matter from hides, and thus, by bringing them as nearly as possible to the fresh state of the skin, when first taken from the carcass, to facilitate the after processes of depilation and tanning. It also presents the additional advantage of not requiring a long exposure to the action of the lime, which is so apt to injure their tissue. A description of this machine for the fulling and softening of both small and large skins, is represented on the left end of the engraving, giving an angle elevation.

This mill can be driven by any power of about half a horse, and will perform the work of ten men in the same time. The washing machine is also represented on the right end of the engraving. Its form is in the shape of a drum, and is the most perfect machine for

washing skins ever introduced. With our Personal knowledge, we can say with safety, that either of these machines will perform work much more rapidly and satisfactorily than any other machine in existence, or than was formerly done by the tedious and laborious processes practiced in early days. Years ago tanners were usually satisfied to locate their tanneries in the midst of a bark forest, upon a small spring, with merely a sufficient quantity of water for manufacturing purposes, and work the machinery by the tedious process of horse power, which is practiced by many even to the present day. But those we will pass by, for they are at least a half century behind the age, and without a doubt reap the reward of *very small profits*.

We are not sufficiently acquainted with the business, to pronounce a decided opinion, but certainly every thing we could see, appeared fully to bear out the representations made in regard to the advantages to be expected from this invention, which is undoubtedly worthy the attention of persons interested in tanning, as well as of capitalists generally.

We say then, look to your own interests, and investigate this matter, for Mr. K's patent must soon give it a world-wide celebrity, and entitle it to the attention of all who are engaged in the manufacture of leather.

A PRACTICAL TANNER.

The eleventh annual report of the Mobile and Ohio Railroad Company has been published. This road is designed to extend from Mobile, in Ala., to Cairo, Ill., at the junction of the Ohio and Mississippi Rivers, and will be, when finished, the longest railroad in the country. At the close of 1858, there were 332½ miles of track laid. The net earnings for the past year were equal to 8½ per cent. on its entire cost, including equipments. The increase of net earnings per mile in 1858, over those of 1857, is nearly 26 per cent. The cotton transport in 1857 was 88,768 bales, and in 1858, 152,528 bales—an increase of 63,820 bales. Sixty-eight miles of track were laid last year, and eighty-seven miles at the north end put in running order. The receipts at the south end of the road, with an ordinary cotton year, are estimated at a million of dollars.

The President of the N. Y. Central has issued a circular to the General Ticket Agents of Western roads, informing them of a reduction of \$1 in fare between Buffalo and New York—from \$9 to \$8.

LITTLE MIAMI & COLUMBUS & XENIA RAILROAD.

REPORT OF THE PRESIDENTS.

This document being quite brief, we give it entire:

GENTLEMEN:—The accompanying Reports of the Superintendent and the Treasurers of our two Companies, present such full, distinct and satisfactory exhibits of the condition of our roads, and our business operations during the past year, as to leave little to be added, by the undersigned, in reference to any matter of interest connected with our Companies.

We take great pleasure in inviting your attention to these Reports, and are happy in being able to congratulate you upon the prosperous condition of your interests, which you have entrusted, in part, to our management.

The relations of our Roads to connecting railroad lines and to other channels of transportation, and the general policy of the administration of our Companies in respect to their local concerns, are so well established, and have been heretofore so fully explained, as not to require any special mention in this communication. The prominence of our Roads in the railroad system of the country is universally conceded, while the uniform frankness and liberality that have marked our intercourse with other railroad companies and the public, have secured us their respect and good will.

No serious accident has occurred upon our roads during the year. No passenger has been injured. The trains have been run, for the most part, with commendable regularity and care. The roads and their equipage have been kept in the best repair for constant service. The depreciation of the track, machinery, cars, and all the appurtenances of the Roads, has been amply provided for by their respective repairs, so as to leave their value fully equal to what it was at the beginning of the year. The capital of the Companies has thus been fully preserved.

The gross revenues for the year were \$1,200,499 29, being an increase over those of 1857 of \$37,336 70, while the net income exceeds that of the previous year in the sum of \$77,205 50, disclosing the gratifying fact of the greater experience in the management of our roads, leading to increased economy in working them; a result which, we are glad to know, has characterized the operations of most of the leading railroads during the past year, and has served very much to strengthen the public confidence in their securities.

By reference to the Superintendent's Report, it will be seen, that while the gross income of the year from Passenger and Mail receipts was less than that received from the

Freight traffic in the sum of \$77,353 23, the net revenue from the former during the same time, exceeded that from the latter by \$47,751 83. This is not as it ought to have been, and not as it would have been but for the unnecessary heavy burdens imposed upon the freight traffic by the unwise system of competition prevailing among the Railroad Companies of the country, leading to the employment of an otherwise unnecessary number of employees, and the transportation of Freights at prices much below the point of fair remuneration.

It is to be earnestly hoped, the damaging effects resulting from this unregulated competition, which is in no way demanded by the public interests, will speedily unite the managers and shareholders of our railroads in organizing some adequate system for so defining and adjusting their business relations as will permanently secure fair returns for the service they are rendering in the transportation of the Freights of the country. Until this be done, a complete restoration of the public confidence in the value of Railroad investments can not be expected.

An effort in this direction, we are pleased to know, is now being made. During the past month, a convention of representatives of the Western Railroad Companies was held at Cleveland, for the purpose of considering a plan of organization for regulating the intercourse between the several Companies of the Western States, and for preparing the way for the establishment of permanently satisfactory business relations with the Eastern Railroad Companies, so as to secure to them and the public the advantages, and to enable them to avoid the evils of competition; which resulted in the preparation of a form of compact to be submitted to the several Western Companies for their approval or rejection. Many of the leading companies have already ratified it, and others will doubtless do so. Even if its final adoption shall fail, because of the want of a sufficient number of the Companies to sanction it, the discussion elicited by its submission to the action of the several companies, will, we hope, prepare the way for the general approval of some other plan to accomplish the same end, the importance of which is universally recognized.

Referring you to the accompanying reports for all detailed information respecting the financial condition of our companies, and their resources for meeting all the wants of the service for the coming year, and renewing the assurances of our obligations to the Superintendent and all our other officers and employees, for the faithful and satisfactory manner in which they have discharged their respective duties, we conclude this report, by expressing our undiminished confidence in the steadily increasing value of our Roads, and the permanent prominence among the leading railroads of the country.

Joint Annual Report of the Treasurers.

ASSETS.

Rolling Stock.....	\$742,613 03	Dec..	\$120,969 56
Bill receivable.....	6,272 00	Dec..	2,465 45
Amount due from Agents.....	29,478 69	Inc..	2,299 37
Am't due from Transportation Cos.....	17,091 37	" "	3,782 79
Am't due from Individuals.....	33,385 33	" "	13,215 28
Am't due from Gen. P. O. Department.....	10,674 51	Dec..	23 73
Col. & Xenia R. R. Stock.....	38,400 00		
" " Bonds.....	96,000 00	Inc..	24,060 00
City of Cincinnati Bonds.....		Dec..	7,060 00
In hands of Treas. of L. M. Co.....	107,389 22	Inc..	88,371 87
In hands of Treas. of C. & Xenia Co.....	19,117 86	Inc..	19,117 86
In hands of Paymaster.....	185 70	Dec..	1,853 25
Materials on hand.....	156,036 95	Inc..	22,395 34
Total.....	1,286,644 72	Inc..	\$40,540 52

* In last year's statement this item was included in the account with the C. & X. R. R. Co.

LIABILITIES.

Bills Payable.....	\$13,600 97	Inc..	\$ 2,573 22
Due to Agents.....	1,709 20	Dec..	229 18
Due to Transportation Companies.....	42,830 59	Dec..	22,053 47
Due to Individuals.....	9,001 11	Dec..	65,473 70
L. M. R. R. Co. "Stock Account".....	785,817 62	Inc..	35,646 24
C. & X. R. R. Co. "Stock Account".....	392,908 82	Inc..	17,823 13
C. & X. R. R. Co. "Current Account".....	40,776 41	Inc..	28,147 34
Total.....	1,286,644 72	Inc..	\$40,540 52

The Revenue and Expenses, with the increase or decrease, as compared with the last year, are as follows:

REVENUE.

Passenger receipts.....	\$539,673 03	Inc..	\$ 1,771 67
Freight Receipts.....	614,658 29	Inc..	26,536 36
Express and Mail Receipts.....	53,167 97	Inc..	9,028 67
Total.....	1,207,499 29	Inc..	\$37,336 70

EXPENSES.

Repairs of Freight Cars.....	\$45,186 14	Inc..	\$ 2,368 04
" Passenger Cars.....	43,397 65	Dec..	1,292 16
" Locomotives.....	59,031 92	" "	6,447 54
" Stationery Machinery.....	1,179 11	" "	2,529 56
" Road.....	107,223 66	" "	48,110 62
" Bridges.....	2,817 65	" "	883 43
" Water Stations.....	982 89	" "	1,617 35
" Depots.....	11,804 42	Inc..	2,904 98
Oil, Tallow and Waste.....	11,270 70	Dec..	7,967 17
Fuel.....	77,736 61	" "	2,117 12
Rents.....	2,066 95	Inc..	1,052 55
Books, Printing, and Stationery.....	8,077 24	" "	2,140 64
Taxes.....	10,158 84	Dec..	7,695 14
Loss and Damage.....	9,818 13	" "	979 13
Transportation Expenses.....	218,642 27	Inc..	6,577 85
Total.....	\$589,394 18	Dec..	\$75,020 92

NET PROFITS.

Revenue as above.....	1,207,499 29		
Expenses ".....	589,394 18		
Net Earnings.....	611,105 15	Inc..	\$112,357 62
To which add Dividends on Col. & Xenia Stock, Decem., 1857, and June, 1858.....	43,270 75	Dec..	4,813 75
Total.....	654,395 86		
Deduct Int'lst. \$105,638 75			
Deduct paym'ts belonging to previous yrs 36,170 28			
Net profits.....	\$512,585 83	Inc..	\$77,905 50
The Little Miami Co.'s proportion of net profits.....	\$341,591 22		
The Columbus and Xenia Co.'s proportion of net profits.....	170,995 61		

Although, by the preceding statement, there appears to be a decrease in our Taxes, still this is not actually the case; as, by a change in the law, we have been required, during the past year, to pay but one-half the

amount assessed, the other half being payable in June next.

The Joint Treasurer's Report is a model one, and will give many useful hints to Railroad Managers. We give it entire.

The following are the Officers and Directors of the Little Miami Railroad Company for the year 1859:

Nathaniel Wright, *President*; D. G. A. Davenport, *Treasurer*; Chas. H. Kilgour, *Secretary*; S. E. Wright, *Auditor*; John Durand, *Superintendent*.

Jacob Strader, R. R. Springer, John H. Groesbeck, Nathaniel Wright, Jas. Hicks, Jr., Larz Anderson, Alphonso Taft, Chas. H. Kilgour, Henry Hanna, Cincinnati; John Bacon, Springfield; Abraham Hivling, Xenia; W. B. Hubbard, Columbus, *Directors*.

The Officers and Directors of the Columbus and Xenia Railroad Company for 1859, are:

Robert Neil, *President*; John Durand, *Superintendent*; Cyrus Fay, *Sec'y and Treas.*

Wm. Dennison, Jr., Robert Neil, Alfred Kelly, D. W. Deshler, L. Goodale, Wm. B. Hubbard, Joseph R. Swan, Columbus; R. R. Springer, Larz Anderson, Chas. H. Kilgour, Cincinnati; Abraham Hivling, Xenia; Simon Gebhart, Dayton, *Directors*.

VIRGINIA AND TENNESSEE R. R.

From the report of this road, which is now before us, we learn that—

The gross earnings of the road have been..... \$168,190 64
Less expenses of operating..... 244,958 79

Showing a net gain of..... \$323,239 85

The road earnings are one hundred and sixty-nine thousand seven hundred and twelve 26-100 dollars in excess of those of the preceding year, and show an increase of forty-seven thousand six hundred and twenty-six dollars on the corresponding nine months of the year previous.

The nine months of the past year compared, it will be borne in mind, embrace all the panic months.

The per centage of expense of receipts was 52, and the net gain 3 32-100 per cent. on the entire cost of the road.

In comparing the operations of the two years last past, those of 1857 embracing nine months only, nine of the year ending 30th of June 1858, corresponding with the preceding year, are considered, and the following result is produced.

The receipts of freights show an increase of twelve per cent.; passenger train receipts, including mail pay, express, etc., gives an increase of *twenty-two* per cent., and gross receipts *fifteen* per cent. The expenses fourteen per cent., and net gain ten per cent. excess of 1857.

The tonnage shows an increase of *twenty-four* per cent. and the passengers four per cent. decrease.

The increase of passenger train service during the past year was *sixty-four* per cent.;

By amount paid Auditor's drafts..	\$117,903 29
By amount paid debts to individuals.....	76,662 20
By amount paid Pay Master for	

Disbursements	186,377 83
By amount paid for Interest.....	3,348 66
By amount paid for bills payable.....	258,135 56
By amount paid for first mortgage coupons.....	6,270 00
By am't paid for enlarged mortgage coupons.....	10,560 00
By amount paid for Salt Works Branch bonds.....	24,500 00
By amount paid for Salt Works Branch coupons.....	6,150 00
By amount paid for discount on uncurrent funds.....	72 00
	690,179 54

Balance on hand and in Banks..... \$38,906 66
F. G. MORRISON, Treasurer.

MISSISSIPPI & TENNESSEE R. R.

The President, in his Annual Report, says that he has reason to congratulate the stockholders of this company, with the prosperous results of the last year's business of the road. Although, on account of unanticipated short crops of cotton, and financial pressure, which more or less affected traffic and travel, our gross receipts were not so large, by considerable, as our estimates, yet our net receipts, almost to the figure realized those estimates. We estimated \$100,000.00 as the net receipts of the year's business, and they actually amounted to \$99,838.33. We estimated our expenses at 50 per cent. on gross receipts, when, in fact, by the efforts of our able and faithful Superintendent, they were reduced to the almost unprecedented figure of 38 per cent., and including the salaries of all the chief officers of the company, which, in a road under construction, is not properly chargeable to operative expenses, they amount to only \$40.23 on gross receipts.

By reference to the Superintendent's report, you will see the result of the year's business.

Receipts for freight and passengers.....	\$161,001 49
Operating expenses.....	61,163 16
Net earnings.....	\$99,838 33

Showing \$2,728.84 gross receipts to each mile of road; and \$1,036.66 operating expenses for each mile of road.

The net cost of construction and equipment of the fifty-nine miles of operative road that did the foregoing business, amounts to \$1-161,152.07. The above net earnings show nearly nine per cent. on the cost and outfit of the road.

They show, likewise, over thirteen per cent. on \$757,540.38 capital stock paid in.

To add to the pure operative expenses of.....	\$61,163 16
Salary of President, Treasurer, etc.....	6,500 00
Office rent, stationery, etc.....	700 00
Interest on funded and floating debt for the year.....	24,893 82

Making in the aggregate..... \$93,297 98 Which, taken from \$161,001.49 gross receipts, would leave \$67,703.51 net, giving to each stockholder of the company a stock dividend of nine per cent. to the dollar on his stock. These results speak well for our enterprise, when it is considered that our road is unfinished, runs through an undeveloped country, and has no through connection with other railroads. If such is the business of the road now, what may the stockholders expect when it is connected at Grenada with New Orleans at the South, and at Memphis with Chicago and Louisville at the North, Charleston, Savannah and Richmond at the East, and Little Rock at the West? That all these railroad connections will be made, and that in a very brief period, no one cognizant of our railroad enterprises can doubt.

To consummate this desirable purpose, the stockholders and officers of the company should exert their most earnest energies. The estimated cost of the unfinished part of our road is as follows:

Graduation, bridging and masonry from Panola to Yockaphatoekna, 12 miles at \$30,000 per mile.....	\$320,000 00
Depot and buildings.....	4,000 00
Superstructure 12 miles at \$8,000 per mile.....	96,000 00
Engineering and contingencies.....	10,000 00
	\$230,000 00

Less amount already estimated and settled.....	\$34,362 18
Less iron on hand and settled.....	35,000 00
Less one-fourth paid contractors, in stock.....	30,000 00
	\$99,362 18

Leaves.....	\$130,637 82
Graduation, bridging and masonry from Yockana to Grenada, twenty-eight miles, at \$10,000 per mile.....	305,200 00
Superstructure twenty-eight miles at \$8,000 per mile.....	224,000 00
Depot and other buildings, 28 miles at \$700 per mile.....	19,000 00
Engineering and contingencies.....	25,000 00
	\$573,800 00

Add balance from Panola to Yockana..... 130,637 82

To this sum should be added for additional equipment required when the road is finished..... 110,000 00

Making.....	\$814,437 82
To this add our floating indebtedness.....	161,991 42

Aggregate of liabilities, and for future work..... \$976,449 24

To meet this, the following are our estimated available assets:

First Mortgage Bonds undisposed of.....	\$429,000 00
Bills receivable.....	62,048 36
Estimated available portion of uncollected stock subscriptions of \$89,227.....	50,000 00
Mississippi loan uncollected.....	18,150 00
Estimated net receipts for year 1858-59.....	80,000 00
Estimated net rec. from road, year 1859-60.....	100,000 00
	\$739,198 36

To realize our first mortgage bonds at par, which we can not at all hope to do, there would still be a deficit of \$237,230.88 in assets compared with estimated expenditures. Besides this, \$200,000 of our first mortgage bonds are deposited with the State of Mississippi as collateral security for the loan made our company.

We think if we had other securities, such as income bonds, though not as available in the market for sale as first mortgage bonds, yet well secured, we could get from the State a substitution of securities, and thus make that portion of our first mortgage bonds locked up available to the company.

To accomplish this purpose, and to supply the deficit that exists between our assets and future estimated expenditures, I recommend to the stockholders to vote authority to our Directory to issue \$600,000 of income bonds, maturing in seven years, with seven per cent. interest, payable in Memphis, semi-annually, secured by a mortgage of the income of the road.

We may not need this whole amount to complete our road, but the Directory will issue only what is needed. This would make our funded debt amount to \$1,300,000, or \$1,300 per mile, which is a great deal less than the funded indebtedness of the majority of railroads in our country. We think we could pay the interest on this debt, and still have, out of the earnings of the road, a handsome dividend for stockholders.

After the road is completed, we could set aside a sinking fund, out of the earnings, that would gradually extinguish these liabilities, reserving an annual dividend on stock.

It would, of course, be far preferable to build our road without debt; but we can not expect to construct a railroad costing \$2,000,000, on \$800,000 of stock. The deficit in stock subscriptions must be made up in debt and the earnings of the road. On account of the importance of a speedy connection with New Orleans at Grenada, and the immense accretions that would be made to the receipts of the road by that connection, we think the

road should be pressed through as speedily as possible, and this can not be done unless the stockholders, at the approaching election, give authority for the issuance of income bonds recommended.

TREASURER'S REPORT.

Graduation.....	\$324,757 16
Trestle work.....	20,324 49
Cross-ties.....	52,939 39
Right of way.....	10,977 26
Track laying.....	33,805 35
Water stations.....	7,011 53
Bridges.....	67,727 34
Turn-tables.....	2,426 69
Iron rails, chairs and spikes.....	442,190 17
Buildings.....	33,426 28
Engineering.....	37,131 77
Contingent engineering.....	5,761 81
	\$1,038,499 14

Cars.....	\$81,001 66
Locomotives.....	51,289 06
Equipment.....	3,507 91
	135,798 63

Maintenance of cars.....	\$4,756 52
Maintenance of way.....	34,070 81
Maintenance of motive power.....	66,780 65
Maintenance cond. transportation.....	51,955 81
	171,563 79

Cash.....	\$4,521 15
Bills receivable.....	62,048 36
Discount and interest account.....	216,709 85
General and contingent expenses.....	49,053 91
Ledger balances.....	8,631 51
	340,964 84

\$1,686,826 40

Capital stock paid viz., in	
Memphis bonds.....	\$250,000 00
Cash.....	417,476 76
Work and materials.....	79,679 38
Bills receivable.....	10,384 24
	\$757,540 38

Bills payable.....	140,013 81
Tennessee bonds, due in 1855.....	98,600 00
First mortgage bonds, due in 1876.....	171,000 00
Mississippi State loan.....	202,799 07
Freight account.....	172,851 03
Mail service.....	1,937 08
Passengers.....	112,175 85
Ledger balances.....	30,609 18
	\$1,686,826 40

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F. M. White, *President*, Memphis, Tenn.; J. C. N. Robertson, A. N. McKay, Desoto Co., Miss.; Ed. F. McGehee, N. R. Sledge, Wm. B. Dickins, Panola Co., Miss.; Nathaniel Howard Grenada, Miss.; Robt. S. Rayburn, Yallabusha Co., Miss.; James Elder, Barnett Graham, Samuel Mosby, Memphis, Tenn.

OFFICERS.

F. M. White, *President*.
C. F. Vance, *Secretary and Treasurer*.
N. Merriwether, *Chief Engineer*.
M. W. Newell, *Superintendent*.

RAILROADS OF MISSOURI.

The report of the Board of Public Works is an elaborate document. From the general statement, it appears that at the date of the report, the length of miles of track laid was 614, with a maximum grade of not exceeding sixty-five feet for any of the roads excepting the Hannibal and St. Joseph. The cash subscriptions paid, amount to \$7,084,337, the most of which has been paid to the Pacific, North Missouri, and Iron Mountain.

PACIFIC RAILROAD, (MAIN LINE).—The total amount expended on main line is \$10,033,823 05; and the further expenditure required per estimates to open the road to Kansas City is not less than \$3,500,000. The floating debt is \$478,000. Its dues, exclusive of unpaid subscriptions, is \$406,000. The road is entitled to a further issue of State bonds amounting to \$220,000. The annual interest on all the bonds authorized to be issued is \$420,000. The gross earnings for the year ending November 30, 1858, were \$636,511.

The total of stock subscribed to this line is \$3,804,400; which, after deductions for discount and commissions, yielded \$2,923,012. The road has 127,000 acres land; and State

ing new bonds at a large discount. The payment of these bonds will release over \$7,300,000, which will form a fund sufficient, it is believed, for the payment of interest on the stock until the road earns regular dividends. The Circular is as follows:

The Directors of the Illinois Central Railroad Company request the share-holders to consider the following plan, which has been suggested for the purpose of placing at the immediate disposal of the Company that portion of the annual revenue derived from the sale of its lands. New expenditures are not contemplated. It is very desirable however, to take early steps to provide for the debt on the Free Lands, maturing Sept. 1, 1860, and obviate the inconvenience attending the terms of the mortgages, by which the current receipts from the sales of land are absorbed in the redemption of the principal.

Although the first mortgage of \$17,000,000 is nominally due in 1875, it is substantially undergoing the process of daily liquidation, because the moneys received, as fast as they are received, must be applied to the payment of the bonds. Thus far \$1,110,000 have been paid.

The funded debt is now \$18,890,000, the annual interest of which is \$2,352,510. During the past three years the net earnings and collections from the lands have been \$3,257,296 12, of which \$1,050,263 69 has been applied to the extinction of the funded debt.

It is proposed to set apart a fund for the payment of interest, by placing in trust the \$2,557,037 76 of Free Land notes held by the Company, which notes, with the proceeds of 149,186 42-100 of land, are valued at \$4,646,240 13. This trust fund will, it is believed, afford an ample provision for interest until dividends are earned upon the capital stock.

The plan suggested is the voluntary payment by the share-holders of the unassessed \$40 upon their shares, and upon receipt thereof the Company will issue full paid certificates of \$100, with interest warrants attached for \$4 per annum, which will be equivalent to 10 per cent upon the \$40 contributed. The amount is to be applied, first, to the wants of the Company for the current year; then to the payment of the Free Land Bonds and to the purchase of the Construction Bonds, to be held for the wants of the Land Department. The extinction of the lien upon the Free Lands will release the property for the purposes of the trust, and render available for the purposes of interest all the collections in the Land Department. It will be seen that no new lien is placed upon the Road, and the obligation to pay interest terminates when dividends are earned.

The means of the Company to pay 4 per cent to the share-holders who may choose to pay is full as apparent, even if all pay, \$40 per share on 175,000 shares is \$7,000,000. The liability for interest is increased \$210,000 per annum. The cash receipts in the Land Department in each of the three last years have been sufficient to cover the increased interest. \$1,050,263 69 is the aggregate for the three years applied to the purchase and cancellation of bonds.

To give effect to this plan, the following resolutions are proposed to be adopted by the Board:

PROPOSED RESOLUTIONS.

Resolved, 1. That the share-holders of this Company may pay up the full amount necessary to complete the sum of \$100 upon each share of its stock held by them, either in cash or the Free Land bonds of the Company; and that from the time any share shall be fully paid, interest shall be paid to the holder thereof at the rate of 4 per centum per annum, payable annually up to Jan. 1, 1862, and thereafter until the Company shall have paid cash dividends for two successive years, from its actual profits, amounting to at least 4 per cent per annum upon its stock, without having at the time an unfunded debt exceeding \$300,000, and without incurring any debt for the means to pay such dividends: Provided, however, that in case any dividend shall be declared upon the stock the interest warrants becoming payable at the time of, or next after the dividend, shall in all cases be regarded and form part of the dividend, and when paid be an acquittance of so much on account thereof.

Resolved, 2. That the money paid in pursuance of the foregoing resolution shall be devoted to the payment of interest, the outstanding Free Land Bonds of the Company, and the purchase of the Construction Bonds of the Company:

And for the further security of the share holders who shall pay the amount of their shares in full, pursuant to the provisions aforesaid.

Resolved, 3. That the Free Lands and the notes and securities received on the sale thereof, subject to the pledge thereof for the payment of the Free Land Bonds, shall be conveyed to — in trust for the following purposes:

(1.) To sell the lands and to collect the notes and securities the proceeds of sales, and with them to pay the then outstanding Free Land Bonds, and then to purchase the Construction Bonds of the Company, and hold the same and sell them as required, either to the Trustees under the Construction Mortgage, or to obtain funds for the further purposes of the Trust.

(2.) To apply the Interest Warrants upon the Construction Bonds so purchased, as they severally mature, to the payment of the interest becoming payable upon the debts of the Company, or to pay the same to the Company for its general purposes as the Directors may require.

(3.) From the proceeds of such sales and collections to pay the interest annually, on the full paid stock, until Jan. 1, 1862, and thereafter until the Company shall make two successive annual cash dividends, from actual profits, without having at the time any unfunded debt exceeding \$300,000, and without incurring any debt for the means to pay such dividend.

(4.) After the Company shall have made two successive annual cash dividends from its actual profits, as above provided, then to reconvey to the Company all the unsold lands in the trust, and to pay and make over to it all the money

and notes, and securities, held in trust; and the trust shall then cease.

Resolved, That upon the completion of the payment in full of any shares, there shall be delivered to the holder certificates of full-paid stocks, with interest warrants attached, for the interest to Jan. 1, 1862; and if at that period the Company shall not have made dividends for two successive years of at least 4 per cent per annum from actual profits, as above provided, then upon presentation of the said share certificates, the Company shall issue to the holders interest warrants for the succeeding year, and so from year to year until such dividends shall have been made as above provided.

The Directors conceive that the convenience and interest of the share-holders alike point to the importance of establishing financial measures which will obviate the necessity of calls upon the shares, and that the foregoing plan will effect such object.

Office of the Illinois Central Railroad Co.,
New York, March 3, 1859.

THE LAKE TRADE—ENLARGEMENT OF NEW YORK CANALS AND INTRODUCTION OF STEAM.

New York has earlier and better comprehended the deep significance of the Lake trade than we here in Philadelphia. She has shrunk from no expenses and labors to secure the most direct and cheap connections with the Lakes and Northwest, and it is to this fact and not to any alleged advantages of geographical position that the extraordinary growth of her foreign commerce is attributable. The State which commands the cheapest means to transport the produce of the West to the seaboard, commands the foreign trade, for it is in quest of that produce that foreign ships steer for our coasts. New York, fully aware of this, was always quick to see her interest. Scarcely has the discovery been made that steam is applicable to canal navigation, than the grand project is formed of enlarging the canals of the State for the purpose of using that power exclusively and to put down the competition of rival States. The Albany Evening Journal published, in a recent article urging this subject upon the consideration of the Legislature, many interesting statistics in reference to the Lake trade, and makes otherwise suggestions and remarks which it would be well for the people of Philadelphia and Pennsylvania to ponder over. In regard to the rapid increase of the trade of Lake Michigan, we are told, that in 1839 1,678 bushels of wheat were exported from Chicago, while in 1858 the exports are nearly 11,000,000 bushels of wheat from that port alone. In 1847 the first shipments of corn were made from Chicago, while in 1858 the exports of corn from that city are nearly 7,500,000 bushels. The total movement of grain from all Lake Michigan ports—Chicago, Milwaukee, Racine, Kenosha, etc., in 1858, has reached the enormously large sum of nearly 28,000,000 bushels.

The total quantities of flour and grain sent eastward from Ohio, Indiana, Michigan, Illinois, Wisconsin, Iowa, Missouri, Kentucky and Canada West to the ports of the different lakes in 1858, were:

Flour, barrels.....	4,586,273
Grain, bushels.....	35,967,529

The total American and Canadian tonnage engaged in the Lake trade, was 912,193,000 in 1848, and 1,548,404,000 in 1858.

If the tonnage of the canals in 1846 be compared with the tonnage in 1853, there was an increase of 87 per cent. in seven years—an annual increase of 12 5-10 per cent. If the tonnage of 1853 be compared with the tonnage of 1858, there is a decrease of 12 7-10 per cent.—an annual decrease of 2 7-10 per cent. This decrease the Journal attributes to other channels of communication having been made, and the trade and tonnage of the Canals having been directed into rival routes, within and without the State of New York. There had been a time when the New York Canals were

the only avenues for the commerce of the great and growing West. To recover what was lost in this respect, and to turn again the whole tide of prosperity towards New York, the Journal proposes an enlargement of the Canals, to admit of an increased tonnage of the boats and the application of steam as a propelling power. "The average tonnage of the large class of boats now on the Canal drawing five feet of water, is about 160 tons; drawing six feet of water, 220 tons. The expense is very little more to carry 220 tons than it is to carry 160 tons. Wheat has been carried from Chicago to New York during the past year for 13 cents per bushel of 60 lbs., a distance of 1,400 miles. The toll on a bushel of Wheat from Buffalo to Troy is 4 14-100 cents. If a bushel of wheat is carried from Chicago to New York for 13 cents, and the toll is 4 14-100 cents, it will leave the carrier only 8 86-100 cents for carrying a bushel of wheat 1,400 miles. With seven feet water in the Canals, and steam as a motive power, a bushel of wheat can be carried from Chicago to New York for ten cents per bushel; and if one tier of locks can be lengthened so as to admit boats 125 feet long, with a tonnage of 300 tons, a bushel of wheat can be carried from Chicago to New York for less than ten cents. It is a general law of trade, that the cheapest route secures the business."

The Journal calculates that in the next thirty years 300,000,000 tons would be transported upon the Canals of the State of New York, exclusive of the contributions of the large and increasing trade of Canada West, and of the coal trade of Pennsylvania. What was wanting to check the competition of rival routes, was the immediate enlargement of the Erie and Oswego canals. The Canadian Government had made a survey for a ship canal from the Georgian Bay to Lake Ontario. It was estimated to cost \$24,000,000. The plan proposed to have locks 300 feet in length and broad enough to admit the largest class vessels and steamers. If this canal was made it would lessen the distance from Chicago to Lake Ontario 400 miles, and a very considerable portion of the Lake trade would be reached through this proposed canal. If the State of Virginia should extend her canal so as to connect with the waters of the Great Kanawha river, she would make all of Southern Ohio, Indiana, and Northern Kentucky tributary to the cities on the sea board of her own State. The city of New York, had an interest, a commercial interest in all these proposed improvements, and the members of the Legislature from that city should lay aside all party considerations and look boldly in the face the proposed encroachments upon her commercial prosperity. The immediate enlargement of the Erie and Oswego Canals was her only safety.

It is to this enterprising and energetic spirit which has ever distinguished the New Yorkers, and which is reflected in the article referred to of the Albany Journal, and to the practical achievements of the State of New York, in the way of inland communications, that we must look for an explanation of her having almost monopolised the importing trade of the North, while the foreign trade of Philadelphia has been steadily declining for years for the want of such a spirit.—Pennsylv., March 8.

The London Illustrated Times says: "Mr. Charles Dickens was offered £10,000 to lecture in America for a year. He declined; not without reference, perhaps, to the sentiments of the American vulgar, regarding his 'American Notes.'"

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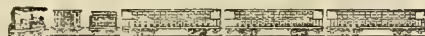
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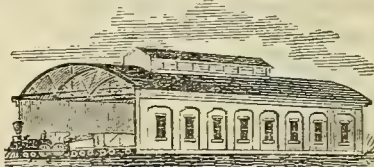
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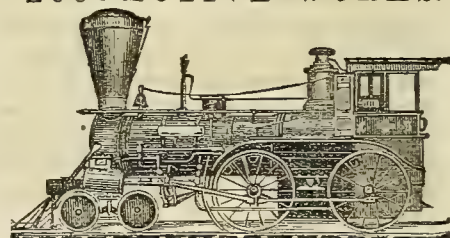
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HYDRAULIC PRESSES for pressing Oils and for other purposes.
MACHINERY of the most approved construction for Flouring and Saw Mills.

CASHPOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.
STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLES and HANGERS.
WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap2

ANDERSON, GATES & WRIGHT,
STATIONERS, BOOKSELLERS,
—AND—

Blank Book Manufacturers,
No. 112 MAIN STREET,
East Side, between Third and Fourth Streets,
KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,
Printed to order in the best manner.
Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.
ANDERSON, GATES & WRIGHT,
(Successors to JACOB ERNST),
112, Main Street, Cincinnati

SCHENECTADY
Locomotive Works,
SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,
AND TENDERS, AND
RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding the work to any part of the country, without delay.

JOHN ELLIS, Agent.
WALTER McQUEEN Sup't. At 16.1y

N. E.—We have two Freight Engines on hand suitable for the 4 feet 10 in. gauge. Cylinders 16 inches diameter, 22 inches stroke. Driving wheels 4½ feet diam. December 18th, 1858.

D. M. CARHART,
TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address, Respectfully Yours,

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Mathematical Instrument Makers
Removed to No. 67 West 6th St.
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G. G. LOBDELL. H. S. M'COMBS. D. P. BUSH.

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MANUFACTURERS OF
CHILLED WHEELS

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TIRES,

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO
Execute Promptly Orders to any Extent
FOR THEIR

CELEBRATED WHEELS,
EITHER SINGLE OR DOUBLE PLATE,
WITH OR WITHOUT AXLES.

WHEELS FITTED
To Hammered or Rolled Axles.
In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

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TUBULAR RAIL.



Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America, by STEPHENS & JENKINS, Covington, Ky. These rails have decided advantages over ANY RAIL hitherto made, among them the following:
The "Tubular Rail" of 50 lbs. per yard, has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.
Its density is greater.
Its welding nearer perfect, and its durability superior.
Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.
The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.
Reference is made to the officers of all the railroads in the vicinity of Cincinnati.
Additional particulars and circulars may be had by addressing
E. W. STEPHENS,
Cincinnati, Ohio.
June 17.—1yr

AMERICAN AND FOREIGN PATENT AGENT.
THOMAS D. STEPHENSON,
SOLICITOR OF PATENTS,
And Consulting Engineer,
No. 5 Tryon Row, (near City Hall) N. Y.

Winter Arrangement.
BALTIMORE AND OHIO
RAILROAD.
GREAT NATIONAL ROUTE.

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood, and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the

West, South-West and North-West.

TWO TRAINS
Leave Wheeling daily, at 12:30 P. M., and 10:26 P. M.

Direct connections are made by these trains
FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.
Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone, by other lines.

Time as quick and fare as low as via any other Route.

Inquire for tickets via the Baltimore and Ohio Railroad, at any of the principal Railroad Offices in the West.

E. F. FULLER, Gen'l Western Agent.
L. M. COLE, General Ticket Agent.

W. P. SMITH, Master Transportation.

HOYT'S WATER GAUGE

Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by
CHARLES W. COPELAND, Gen. Agent,
No. 66 Broadway, N. Y.
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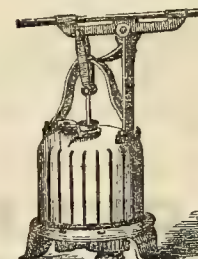
GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action
SUCTION & FORCE PUMP

AND
Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps, as the best Pump now in use; and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair, Ohio Mechanics' Institute. June 18, 1855—1y

ENGINEERING!!

The undersigned is prepared to furnish

SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of
Steam Vessels, Engines, Boilers, Mill Work, &c.
Particular attention given to the superintending of
LOCOMOTIVES, TENDERS, CARS,
And Railway Machinery of every Description,
While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for
ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES METALLIC SELF ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK,

Also, for Water Gauges, Indicators, Steam Whistlers
CHAS. W. COPELAND,
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CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,
THEODORE DEHON,
64 Broadway, New York.

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The Great Arnold Secret Discovered at Last.

BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.

MANUFACTORY NO. 39 VINE ST.,
CINCINNATI, OHIO.

READ THIS!

I have, at the request of Messrs. Cook, Merritt & Brown, Wholesale Stationers, 18 Beekman Street, New York, analysed two samples of FLUID INK, one marked *Arnold's Chemical Writing Fluid, F. & J. Arnold, London.* The other—BUTLER'S MERCANTILE RECORD FLUID, CINCINNATI.

I find both of these INKS to contain the same ingredients, and in the same state of combination. From the result of the various tests to which I have subjected them, I find that they are equal in *quality as well as durability.*

JAMES R. CHILTON, M. D., *Chemist.*

New York, November 9, 1859.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. RECORD.—For Ledgers and Records Only. MERCANTILE.—For Books, Letters, and General Purposes. COPYING.—For Letter Press only. Have had awarded them Fourteen Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

Transportation Office, Cincinnati, Hamilton and Dayton Railroad.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial.

Yours, truly,

J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio & Mississippi; Central Ohio; Baltimore & Ohio; Jackson and Vicksburg; Bellefontaine and Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena and Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B.—Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

GENERAL RAILWAY SUPPLY AGENCY.

SNOOK & HILL'S PATENT

LOCOMOTIVE LAMPS.

83 Liberty Street, Cor. of Broadway,
NEW YORK.

JOHN W. KELLY
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

RAILROAD ENGINES & CARS,

ALSO AGENT FOR THE SALE OF

HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,

JUDSON'S GOVERNOR VALVE.

Orders solicited and promptly filled.

Cincinnati, Hamilton and Dayton,



RAILROAD.

FOUR TRAINS
LEAVE THE SIXTH STREET DEPOT DAILY.

TRAINS RUN THROUGH TO RICHMOND, LIMA,
SANDUSKY, AND DELAWARE WITHOUT
CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND
NORTH-WESTERN CITIES.

6 A. M. MAIL TRAIN, connects at Dayton with Sandusky, Dayton and Cincinnati Road, for Springfield and Sandusky—at URBANA, for Columbus—at CLEVELAND, for Cleveland and Buffalo, Toledo, Detroit and Chicago, arriving at Detroit at 5:30 P. M. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Muncie. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

8:40 A. M. TRAIN, for Cleveland and Pittsburg, via Delaware, makes close connection at CRESTLINE, for Pittsburg, Baltimore, Philadelphia, and New York; and at CLEVELAND for Dunkirk, Buffalo, Boston and New York.

4:30 P. M. TRAIN, for Springfield and Sandusky—connects at FOREST, for Chicago—at CLEVELAND, for Toledo—at SANDUSKY, for Cleveland and the East. Connects also at DAYTON, for Troy, Piqua, Sidney, Lima, and Chicago—at SIDNEY, for Pittsburg and the East. Also connects at RICHMOND, for Indianapolis, Terre Haute, St. Louis and Chicago.

5:40 P. M. TRAIN, for Hamilton and all way stations.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; No. 3 Burnet House; or at the Sixth Street Depot.

D. McLAREN, Superintendent.

GEO. H. KNIGHT & BROTHER,
Patent Attorneys,

N. E. Corner Vine & 4th.

A CARD.

I take pleasure in announcing that all difficulties between my former partners, in the firm of APPLEGATE & Co., and myself have been amicably adjusted. The business will be continued by them, at the old stand, they settling all the business connected with the firm.

I do not hesitate to recommend my friends to make their purchases of them, as I believe they will find it to their advantage to do so.

JOHN B. RYAN,
Late of the Firm of APPLEGATE & Co.,
Booksellers and Stationers.
Cincinnati, March 1st, 1859.

In referring to the above Card, we take the opportunity of saying to our friends and the public, that the business as heretofore conducted by us, will be continued at the same place and under the same name and style as formerly.

Our stock is very large and varied, having just been replenished for our spring sale. We are prepared to fill all orders, at lowest prices, with promptness and dispatch, guaranteeing satisfaction to all who may favor us with their orders.

We trust by continued exertions to merit a continuance of past favors.

JAMES APPLEGATE,
SAM'L FLICKENGER,
ARTHUR H. POUNSFORD.
Cincinnati, March 1st, 1859.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the T above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Drills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio;
LEE & LEAVITT

The Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

Thursday Morning, March 25, 1859.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.

One square, single insertion,.....	\$1 00
“ “ per month,.....	3 00
“ “ six months,.....	12 00
“ “ per annum,.....	20 00
“ column, single insertion,.....	5 00
“ “ per month,.....	10 00
“ “ six months,.....	40 00
“ “ per annum,.....	80 00
“ page, single insertion,.....	15 00
“ “ per month,.....	25 00
“ “ six months,.....	110 00
“ “ per annum,.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

✂ The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

✂ Railroad Presidents, Superintendents and Secretaries, are requested to send us copies of all Annual and other Reports they may issue, together with their Monthly Statements, and such other matters of interest as they may be willing to furnish us

To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

THE MECHANIC'S, MACHINIST'S, AND ENGINEER'S Practical Book of Reference: Containing Tables and Formulae for use in Superficial and Solid Mensuration; Strength and Weight of Materials; Mechanics; Machinery; Hydraulics; Hydrodynamics; Marine Engines; Chemistry, and Miscellaneous Receipts. Adapted to and for the use of all classes of Practical Mechanics. Together with the Engineer's Field Book: Containing Formulae for the various methods of running and changing Lines, Locating Side Tracks and Switches, etc., etc. Tables of Radii and their Logarithms, Natural and Logarithmic Versed Sines and External Secants, Natural Sines and Tangents to every Degree and Minute of the of the Quadrant, and Logarithms of Natural Numbers from 1 to 10,000. By CHARLES HASLETT, Civil Engineer. Edited by CHARLES W. HACKLEY, Prof. of Mathematics in Columbia College, N. Y. 520 pages, containing 176 diagrams. Price, bound in Morocco, gilt edges, pocket book form with tucks, \$2 50. Plain, \$1 75. Mailed free of postage on receipt of price. New York: Wm. A. TOWNSEND AND COMPANY, 1859.

We are indebted to the publishers for a copy of the above work. We give the title page entire, so that our reader may judge of the extent and character of the contents. The work is got up in convenient size for the pocket, and will be a valuable assistant to every engineer.

MILWAUKEE AND CHICAGO R. R.—At the recent election the following gentlemen were elected: C. B. Hall, *Pres.*, Milwaukee; John V. Ayer, *Vice-Pres.*, Kenosha; A. V. H. Carpenter, *Sec.*, Milwaukee; C. P. Leland, *Treas.*, Milwaukee; C. E. Scofield, *Asst. Treas.*, pro tem., N. York; C. B. Hall, J. T. Moody, S. B. Scott, *Executive Com.*

MONEY—ITS QUANTITY IN THE U. STATES—EFFECT ON PRICE—RISE OF INCOMES—INFLATION OF PROPERTY.

Among political economists, the relations of money to capital and commercial movement have ever been a most interesting problem. It is said, and laid down as a principle, that *price* varies with the quantity of money. But, this principle requires a great deal of modification, so much so, that the principle ceases to be a practical one. Thus, we must first define *price*, by saying, that *price* signifies only the estimation *in money*. For if *price* were confounded with *value*, it would have no meaning; for, a horse has value without money, and can be exchanged for other articles without the aid of money. *Price*, then, to have a definite meaning, must be defined as the *estimation of property in money*. If all other things were precisely equal, the only thing to be considered, were the relative quantities of money and property, it would undoubtedly be true, that *price* varies with the quantity of money in the country; but, unfortunately for the principle, this is by no means true. Other things are *not* the same. One great and continual variation is caused by the *change in the rate of commercial movement*. If commerce, either in exchanges or in industry is stagnant, no increase in the quantity of money will raise prices. Because there is no competition in buying things. There is no demand for property. No uses for it. This was illustrated by the condition of Amsterdam some years since. Money was most abundant, and loans could be made at 4 per cent.; but rents and property were very low. No one built houses, and no one could sell them for what they cost; simply because commerce was stagnant. Money had greatly increased, but prices were not raised. Take now the reverse of this as commonly exhibited in American towns and business. Commerce and industry, which we call "*enterprise*," are so very active, that the abundance of money is more than met by the incessant demand, so that it does not act in increasing prices directly, in proportion to the increase of money. Prices are raised gradually, but by no means in proportion. In the last twenty years, money has been quadrupled in the United States, but the price of a bushel of wheat is not much greater. Land lots in or near cities have greatly increased in value from local advantages; but, the price of an improved farm, easy to market, has increased comparatively little.

In general, the proposition we stated amounts to this, that the increase of money *tends* to increase price; but, that it may be counteracted by the stagnation of commerce and the prostration of business.

In general, the proposition is true, that the increase of money increases prices; but, not

always in equal proportion. But, here we again come to another question—*what is Money?*

There are a great many crude and senseless ideas entertained and uttered on this subject. Many people think that this Government makes money, and nothing is money but the coinage of the Government. Others think that Bank Notes are money, because banks issue. But, all these are palpable mistakes. Nothing is "*current money of the merchant*," but what he chooses to take; and he and other merchants may choose to take what they please. Anything is money, which is agreed to be taken as a *common medium of exchange*. The Government of the United States says, that an American dollar is worth a Spanish dollar; but the Chinese say it is only worth seventy cents on the dollar; and so it has to be paid for that in exchange for tea. In the center of Africa, "*current money*" is certain strings of shells, and with these sheep and camels may be bought. In the great exchange of the world, no government or bank is the maker of *money*, and, in fact, money is every where what is "*current*" among merchants, and whether it be silver, copper, gold, or shells, it is really made by commerce, and is the *currency* of commerce.

This being *money*, let us see what it is in the United States. In this country, money is a mixed currency, composed of gold, silver, copper, and bank paper. Or, in other words, coin and paper.

Looking to this mixed currency, we find, as a fact, that the *money* of the United States has immensely increased in the last twenty years, so that, at this time, it is ten fold greater, in proportion, than it was; and in consequence of this increase, a great change has taken place in the nominal value of property, and in the price of labor, and the products of industry. Let us state a few facts. In the commencement of the *RECORD*, we made, on the most accurate data, from Government reports and other authentic documents, a statement of the amount of *money* in the United States, and its proportion to population. On that *basis*, it is not difficult to ascertain the amount now. For, how is the quantity varied? The money of the country is not sensibly varied; except in three ways:

1. The products of Mines;
2. The variation in the quantities of Bank Notes,
3. And in the balance of the Exports and Imports in coin and bullion.

There has been a good deal *said* about money brought by immigrants; but, it amounts to nothing worth consideration. The immigrants who have any considerable sum of money bring it in Bills of Exchange. As to the rest, the passage to America is paid in Europe, and very few have much left. All the actual money of immigrants amounts to but little.

In the RECORD of March 3, 1853, the following statement was made of the money in circulation at that time:

Coin in 1836.....	\$73,000,000
American Gold received since.....	149,482,435
	\$222,482,435
Deduct excess of Exports over Imports.....	18,500,400
Coin in 1853.....	\$203,982,435
Bank Notes in Circulation.....	153,958,358
	\$357,940,793
Deducting Coin in Bank Vaults and in Sub Treasury.....	63,483,536

Money in Common Circulation, 1853.....\$295,457,257

Now, to this we must apply the products of the Mines, the balance of exports, and the present issue of Bank Notes, and we shall have very nearly the present money of circulation. For several years, the Treasury Department has reported all these facts, and we may presume with reasonable accuracy.

The coinage and assay of gold and silver at the Mints, represent very nearly the amount of gold and silver mined; but, is a little short as some small quantities are sent out of the country, as bullion.

The following are the aggregates of gold and silver, of native production, sent to the Mints in 1854-'58, inclusive:

Gold at Philadelphia.....	\$41,961,712
" San Francisco.....	92,543,133
" New Orleans.....	2,255,363
" Charlotte.....	855,629
" New York.....	80,504,457
Silver, (Native).....	1,426,918
Gold at Dahlonega.....	633,375

Aggregate.....	\$220,190,787
Balance of Exports.....	224,908,800

Loss of Specie since 1853.....\$4,717,213

We suppose that this difference is fully made up by the amount of gold sent out without coinage. It is more than made up by the balance of imports; for the past eight months the balance of trade being now in our favor.

By the Annual Report on the Finances of the United States, it appears, that the amount of Bank Note circulation in 1857-'58, was \$155,208,544, which \$1,250,186, and this is all the increase of money of commerce has taken place since March, 1853.

The circulation now is, therefore:

Circulation in 1853.....	\$295,457,257
Increase of Bank Notes.....	1,250,186

Aggregate.....\$286,707,443

It has been much greater; but, in consequence of the commercial revulsion of 1857, is now reduced to the same point as in 1853. The effect of this on prices, is to keep the money estimation of values at the same point it was in 1853-'54; and if the price of improved farms and of stocks be examined, this will be found true. In the future, as the balance of trade is now restored, prices will advance.

COLUMBUS CONVENTION.—As we go to press there is assembling at Columbus, a Convention of Western and South Western Railroad Companies. The object of this gathering is to fix upon the time of arrival and departure of trains from and at the principal points, and to agree upon the rates of speed.

RAILROADS OF MISSOURI—REPORT OF THE BOARD OF PUBLIC WORKS—ANALYSIS.

It is but a short time since the State of Missouri entered upon a system of Railroads. These roads are now very far advanced, and are among the most important in America; because immediately connecting the system of railroads in the Ohio Valley, with the great plain from the Missouri to the Rocky Mountains, and thence to the territories beyond. From the beginning, it was very obvious, that the roads of Missouri could not be finished without State aid, and accordingly the State stepped forward and advanced its credit to the whole amount required; not, however, without requiring a similar grant on the part of Stockholders, whether individuals or counties. The Report of the Board of Public Works give all the particulars of the six roads to which State aid is given, which are either useful or interesting. These Reports are, however, in rather a crude State, having neither index nor tables. The general aggregates are as follows:

Roads.....	6
Aggregate length.....	1,173 miles.
Track laid.....	614 "
Maximum Grade.....	65 feet.
Stock Subscribed.....	\$12,004,875
Stock paid in Cash.....	7,084,337
State credit authorized.....	24,950,000
State Bonds Issued.....	19,056,006
Discount on State Bonds.....	2,776,566

The Board says, with truth, that, considering the credit of Missouri, too large a sum has been absorbed in discounts, commissions, and brokerage.

Since the original grants, another has been made to the Platte County Road. The following is a table of the length and work on each road:

	Length.	Complete.
Pacific.....	282 miles.....	163 miles.
North Missouri.....	336 ".....	168 "
Hannibal and St. Joseph.....	206 ".....	206 "
South-West.....	283 ".....	19 "
Cairo and Fulton.....	78 ".....	7 "
St. Louis and Iron Mountain.....	86½ ".....	86½ "
Aggregate.....	1,171½ "	649½ "

The operations of these roads, as far as they are yet constructed, are as follows:

1. THE PACIFIC.

Earnings of the Pacific Railroad for the year ending November 30, 1853.

	Passengers.	Freight.	Mails.	Totals.
Dec.....	\$24,704 24	\$18,467 55	\$1,302 09	\$44,473 88
Jan.....	18,195 30	14,167 02	1,302 09	33,664 41
Feb.....	14,846 80	12,369 61	1,302 09	28,458 50
March.....	25,818 22	27,046 14	1,302 09	54,166 44
April.....	21,752 84	30,397 58	1,302 09	63,442 51
May.....	31,669 46	22,310 27	1,302 08	54,681 81
June.....	22,897 25	14,862 37	1,302 08	39,061 70
July.....	24,404 23	29,102 25	1,875 00	55,281 48
Aug.....	28,770 33	34,210 67	2,037 50	65,018 50
Sep.....	32,860 52	41,541 38	2,037 50	76,439 40
Oct.....	36,420 62	26,580 35	2,037 50	65,038 48
Nov.....	29,051 62	25,993 31	2,037 50	56,182 63
Totals.....	\$320,791 44	\$296,580 70	\$19,139 60	\$636,511 74

CAPITAL STOCK SUBSCRIPTION—Main Line.

The total subscription of Stock for construction of Main Line of road.....	\$3,804,400 00
The amount paid on same.....	3,146,170 25
Amount remaining unpaid.....	658,229 75
Deduct conditional subscriptions, Morgan county.....	25,000 00
	\$633,229 75
The amount paid on subscriptions, as above.....	\$3,146,170 25

Discount on \$500,000 bonds, city of St. Louis.....	\$42,397 50
Discount on \$1,375,000 bonds, county of St. Louis.....	127,125 00
Discount on \$350,000, anticipation bonds.....	19,810 00
Commissions on the sale of above bonds, and including one per cent., paid G. R. Smith and others, for collections west of Jefferson.....	33,825 00
	223,157 50

Net proceeds of subscription for Main Line.....	\$2,923,012 75
State Bonds.....	6,780,000 00

Total Cost.....	\$9,703,012 75
Average per mile.....	\$36,000 00

Besides this, the road has 127,000 acres of land.

2. HANNIBAL AND ST. JOSEPH.

General Abstract of the Receipts and Expenditures of the Hannibal and St. Joseph Railroad Company, November 1, 1853.

RECEIPTS.	
From Stockholders.....	\$1,083,061 20
From State of Missouri, in bonds.....	3,000,000 00
From Company Mortgage Bonds.....	3,550,000 00
From Land, Rent, Damages, etc.....	964 10
From Company plain bonds, issued in payment for depot grounds, etc., in Hannibal.....	11 000 00
From operating account.....	14,679 93
	\$7,659,705 28

EXPENDITURES.	
For Engineering.....	\$ 177,513 94
For Int. Discount, Exchange, and Commission.....	2,005,260 46
For Depot Grounds.....	42,925 06
For Land Department—Locating, Surveying, Examining, and Plotting Lands.....	43 007 44
For Construction account.....	4,209,092 58
For Depot Buildings.....	90,102 04
For Sinking Fund on State Bonds.....	1,900 00
For Fencing.....	6,271 41
For Right of Way, land damages, etc.....	54,061 55
For Expenses and Contingencies.....	244,144 87
For Equipment, Rolling Stock, etc.....	291,312 83
	\$7,163,892 17

	\$493,813 11
County bonds in Treasury.....	\$20,000 00
Cash in Treasury.....	109,780 23
Balance Fiscal Agency account.....	357,093 76
Balance, John Duff & Co., act.....	6,939 12
	\$493,813 11

3. CAIRO AND FULTON.

Stock Subscription Account Cairo and Fulton Railroad Company of Missouri.

Subscribed by Stoddard Co.....	6,000 shares....	\$150,000 00
" Butler Co.....	4,000 ".....	100,000 00
" Dunklin Co.....	4,000 ".....	100,000 00
" Scott Co.....	2,000 ".....	50,000 00
" Ripley Co.....	750 ".....	19,500 00
" Ind's in Mo.....	1,607 ".....	40,175 00

Total stock owned in Mo.....	18,357 ".....	459,675 00
Individual subscription out of Missouri.....	32,084 ".....	802,100 00
Total stock subscribed.....	50,471 ".....	1,261,675 00
Total stock not subscribed.....	9,529 ".....	238,925 00

Total Capital Stock.....	60,000 shares....	\$1,500,000 00
State Bonds.....		650,000 00
Lands.....		570,507 acres.

4. ST LOUIS AND IRON MOUNTAIN.

Subscriptions.....\$1,999,300

State Bonds.....	3,600,000
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Capital.....\$5,599,300

Earnings of the St. Louis and Iron Mountain Railroad, for Eleven Months, terminating September 30, 1853.

Year.	Months.	From Passengers.	From Freight.	From Mails.	Totals.
1857.	Nov.....	\$3,416 85	\$1,120 40		\$4,537 25
	Dec.....	3,204 42	1,232 20	\$70 80	4,514 40
1858.	Jan.....	3,514 00	1,286 15	160 20	4,960 35
	Feb.....	4,100 15	1,945 45		6,045 60
	March.....	4,940 05	3,507 06	202 83	8,649 94
	April.....	6,839 75	7,083 03	362 92	14,285 70
	May.....	8,640 80	9,317 78	362 92	18,321 50
	June.....	7,184 00	9,818 16	362 91	17,365 07
	July.....	8,552 25	7,918 55	725 84	17,196 64
	Aug.....	8,456 90	8,480 91	725 83	17,663 64
	Sept.....	8,378 60	10,017 38	825 83	19,118 81
		\$67,222 76	61,729 01	3,709 08	
	Total Earnings.....				\$132,660 84

5. NORTH MISSOURI.

Subscriptions.....	\$2,620,170
State Bonds.....	5,300,000
Capital.....	\$7,120,100

The business has been:

RECEIPTS.

Freight account.....	\$114,038 35
Passenger account.....	160,830 50
Excess of Expenditures.....	1,320 86
Total.....	\$276,359 71

EXPENSES.

Excess of Expenditures over and above receipts, as shown above.....	\$1,320 86
Liabilities not included in the above statement—see statement No. 8.....	17,954 51
Total excess of expenditures.....	\$19,475 37

6. SOUTH-WEST BRANCH.

Subscriptions.....	\$356,000
Bonds, guaranteed by State.....	4,500,000
Lands.....	1,040,000 acres.

This road has but nineteen miles of rail, but is progressing.

TANNERS IN LEATHER.

Tanning consists in the combination of the gelatinous tissue with tannin, by immersing the skins in an infusion of oak bark, or other substance containing tannin. The tanning influences is, probably, not exerted solely by the tannin, but also partly by the extractive matter, more or less of which always exists in the tanning material.

During the soaking, the epidermis of the skins disappears, and the tissue of the latter is gelatinized, and thus predisposed to chemical union with the tannin. This gelatinization of the tissues is all essential, and is promoted by the gallic acid fermentation of the tanning material. This is the more probable science. The same effect may be produced by the use of a very dilute acetic, and other operations intended to perfect the quality and appearance of the leather.

Leather is an article of manufacture entirely a compound substance. Although it is made of the skins of animals, it is as different from the raw material as oil is from soap, which is one of its two ingredients. Skins are principally composed of gelatin, which is soluble in hot water, and is converted into glue by repeated steepings in warm water. Leather is simply the raw material combined with other substances, which render it elastic and insoluble in water; various substances are employed to obtain this result, and different qualities of leather are produced by the different ingredients employed, and the modes of using them in its manufacture. This is the theory of tanning, but in carrying it into practice, the manipulations are exceedingly various, and the qualities of the leather manufactured depends on a very extensive range of processes, machinery and chemical substances. All the processes of tanning are laborious, expensive, and tedious. It formerly required months and years to tan leather from hides, and the cost of manufacturing from the raw material amounted to millions of dollars annually, but

now time and expense are materially reduced.

Inventive genius has done wonders in facilitating chemical-physical processes of this art. Only think, for a moment, of the change which has come over the spirit of the tanner's dream. Three, and even seven years were once considered necessary for the perfection of certain kinds of leather—such as that which furnishes our shoe soles. The machinery aided process by which these wonders have been accomplished, has been known and used in this country for some years. By the aid of Mr. Kennedy's improvements, the principle of which is to bring the skins into rapidly repeated contact with the tanning liquor, leather is formed more rapidly and expeditiously, and of a better quality.

But no important improvement in any manufacturing business, can come into general use without the co-operation of energetic business men engaged in it.

In this age of improvements, it can not possibly be considered a fixed fact that everything has arrived at its manifest destiny of perfection. There is room for improvements in every branch of manufacturing business. As to the art of tanning, we may consider it yet in its infancy.

The only way to progress, is to make efforts to improve; and the failure of a thousand plans should never be held up as a bugbear or a barrier to arrest the introduction and trial of a new and reasonable invention to improve any art. It is our opinion, that improvements will yet be made in the manufacture of leather, of such a character as will reduce its manufacturing cost at least one-half. Leather is an article of universal use; it is worn by the civilized, and by the savage; the high, and the low; the rich and the poor of all nations; from the icy regions of the North, to the burning sands of the tropic. It was known and used by man, long before the first alphabet was invented, before the waters of the deluge had rolled over the face of our planet, before the Tower of Babel was erected, or the foundation of the ever-enduring pyramids were laid.

Leather was employed for many useful and ornamental purposes, and numerous are its applications to various branches of industry. Besides its extensive use for covering the head and feet, wearing apparel, saddles, harness, carriages, and the purposes of the book-binder, it is largely employed for the embellishment of objects of taste and ornament. Independently of the direct importance of the leather trade, it exerts a very decided incidental influence in developing the resource of a country, by giving value to certain materials used in, and resulting from its manufacture. Besides the immense employment which it gives to thousands of artisans, it has built up colonies and towns, which owe their origin and progress entirely to the interests connected with it. Even the waste materials of slaughter-houses, tanneries, curriers' shops, and workers in lea-

ther, have important application; the horns serving for the manufacture of combs, buttons, and umbrella furniture; the hair for plastering; the spent lime for the farmer; the skin clippings for the glue-boiler, and the leather shavings for the manufacturer of prussiate of potash. The following statements will give an idea of the vast extent and rapid increase of the trade in leather:

In France, a country eminent for the quantity and quality of the articles which it produces, the average number of skins annually converted into leather, is about three million of whole skins. In the United States, the manufacture of leather is only beginning to be of much importance. Since the early part of the present century, it has been rapidly extended, until it has become, with its allies and dependent arts, one of the most prominent elements of national prosperity.

We append a statistical table, compiled from the returns of the seventh census, showing the condition of the tanning interests.

The *National Intelligencer* compiles from the census returns, the following table of the tanneries in the United States, in A. D. 1850:

Number of establishments.....	9,263
Capital invested.....	\$18,900,557
Value of raw materials.....	19,613,237
Value of product.....	32,261,796

The number of hides is 6,128,070; skins 2,653,865, and about 6,000,000 sheep, goat and other small skins tanned and dressed annually, which are not included in the number. The number of hands employed is 20,909 males, and 102 females. The monthly wages of the males amounts to \$416,214—of the females \$970. The number of sides of leather produced annually, is 12,557,940, and of skins 2,653,865.

The foregoing estimates were carefully compiled from the returns of the seventh census, and may be considered correct. If we take it for granted, that the leather trade has advanced in amount at the rate of ten per cent. per annum, for the last nine years, the figures should now stand thus:

Amount of capital invested.....	\$38,756,345 60
Value of raw material.....	40,344,438 30
Value of product.....	61,451,538 50

These calculations may fall short of, but it is believed that they do not exceed the truth. They may at least, serve to indicate the vast extent, and rapid increase of the leather trade in this country. But what must it be a quarter of a century hence. At the present rate of increase, we may fairly calculate that in twenty-five years hence, the tanning and currying business will have TRIPLED, thus placing it almost in the van of all domestic manufactures.

A business of such extent and importance, well deserves the attention of the manufacturer, for what ever abridges and facilitates the process, adds to the value of the capital invested. The claims of Mr. Kennedy's invention are reasonable and philosophical. The perfection of the results, depends not so much upon the energy and proper combinations of

such astringents, properties and chemicals, as are employed to effect it. The more rapid the action of the tannin agents, and the quicker their work is well done, the more perfect is the article manufactured.

This is the doctrine of this improvement, and its correctness, economy, and great utility, are submitted to the scrutiny of science, and the test of the most thorough experiment.

A PRACTICAL TANNER.

THE RAILROADS OF SARDINIA.

The war clouds which lower upon Italy, where, from present indications, the armies of France and Austria are soon to meet in battle, has drawn once more to that classic land, the world's attention and the sympathies and good wishes of all spectator nations. And among the existing political divisions of the Italian peninsula, the Kingdom of Sardinia, from its belligerent attitude towards Austria, and as the ally of France, is made the scene of deepest interest.

Hence whatever relates to Sardinia, whether to her internal industrial policy or to her external political policy, is assumed to possess an attraction to the reading public. And, acting on this belief, we submit to-day the latest intelligence of the condition of her iron ways, derived from a report by E. M. Erskine, Secretary to the British Legation at Turin, contained in a volume of reports made to Parliament in 1858; for a copy of which report we are indebted to a distinguished American now abroad, and to whose kindness and painstaking we are indebted for documents from which we have from time to time enriched these columns, with quoted extracts.

The Kingdom of Sardinia comprises the Island of Sardinia, containing in three divisions, 6,029,015 statute acres; and eleven continental divisions containing 12,803,777 statute acres, the whole forming 18,832,792 acres, or 29,426 square miles. The Kingdom of Sardinia, consequently, is but little over three-fifths the size of the State of Pennsylvania. The whole area of the Peninsula of Italy, including Sicily, is but 126,000 square miles; whereas, the area of the three contiguous States, Pennsylvania, New York and Ohio, is 132,964 square miles.

Italy contains ten distinct political governments, whose joint population is about 23,000,000 souls. Italy, moreover, is a part of the map of the world as known to the ancients, and has contributed to the history of the world as many pages, if not as many grand events, as any other part of the earth's surface of equally limited extent.

Venice, once Queen of the Seas, and Rome once Mistress of the World, are in Italy, and though their greatness and power have departed, still Rome as the capital of the States of the Church, and Venice as a city in an Austrian province, are spots of historic interest and political solicitude to many minds outside of Sardinia, Austria and France, which three nations are preparing as if about to solve the Italian question by appeal to arms and the issue of battle.

It may be, however, that by the wiles of diplomacy the alternative which seems to impend, may be deferred; and it may be, also, that by the wiles of diplomacy the victors in the field may be disappointed in their expectations of conquest.

European diplomacy is the great mystery of these days, and the Paris Conference was the

most important of all recent political convocations or assemblies of wise men. Four nations—three against one—drifted into the Crimean War, but diplomacy made peace in the midst of it, leaving the nations as they were when the first overt act was committed.

Mr. Erskine says:

The main line from Turin to Genoa, about 104 miles in length, was constructed by the State between the years 1846 and 1853. It has twenty-five intermediate stations, and a double line of rails.

The Turin terminus is 128 metres (about 780 feet) above the level of the sea. No serious engineering difficulties were experienced until Villanuova, where the line commences the ascent of the San Paola heights by colossal embankments and cuttings, and at an incline of about 1 in 100 for seven miles. This section has entailed enormous outlay, and has been a source of much trouble and anxiety on account of the singularly shifting nature of the soil.

The works are again light until near Serravalle, where the line enters the valley of the Scrivia, and is carried eight times across that torrent on substantial bridges in brickwork, four of which have arches of upwards of 131 feet span.

Busalla, the highest point of the line, is 1,184 feet above the level of the sea. It is here carried through the principal chain of Apennines by the so-called "Giovi" Tunnel, which is 3,609 English yards (or more than two miles) in length, with two ventilating shafts, one of which is 711 feet in depth. It is cased throughout with brickwork, (in some places more than three feet thick.) The gradients are the steepest in existence, viz: 35 in the one thousand for a short distance, and 29 in the one thousand generally. That of the "Sommering" Pass being 25 in the one thousand, and Folkestone 33. The total cost of this gigantic undertaking was 11,000,000 francs.

As it approaches Genoa, the line is carried by the St. Lazzaro Tunnel under the Lighthouse Hill, into a terminus within the town, constructed at great expense on a space obtained by excavations in the rock, and by the removal of buildings.

In spite of their steep gradients, the inclined planes are ascended by locomotives specially constructed for the purpose.

From Alessandria another line branches off in the direction of Aosta. It traverses the hills of Valenza by a tunnel 2,550 yards in length, and crosses the River Po on a magnificent bridge in brickwork, touches Mortara, Novara, and Oleggio, and terminates, for the present, at Arona, on the Lago Maggiore. The permanent way consists of one line of rails only, for the portion of the line between Alessandria and Arona.

The average cost of construction and of the plant and rolling stock of these lines, has been about 34,000Z. per English mile.

Besides the above railway, belonging to the State, there are several constructed by private enterprise, and laid down for one line of rails only. A portion of these are worked by the companies which own them, and others by Government, which divides the gross receipts, equally, with the companies.

The following enumeration of these companies may be useful:

1. *Turin to Susa*.—The present terminus of this line is in the Government station at Turin; but it is contemplated, hereafter, to amalgamate the Victor Emanuel, the Susa, and the Novara lines, and the present station of the

latter railway would then become the common terminus. This line ascends the valley of the Dora Riparia to Susa, and may fairly be deemed the first section of the great international line, through the Alps, between France and Piedmont.

2. *Turin to Pinerola*.—Branches from the Government line at about four and a half miles from Turin.

3. *Turin to Coni*.—With a branch to Saluce; traverses the rich and populous plains on the right bank of the Po, and terminates, for the present, at Coni, with a prospect of being eventually continued to Nice by means of a tunnel through the Maritime Alps. The branch from Savigliano to Saluce is ten miles long. A branch constructed by a different company, from—

4. *Cavallermaggiore to Bra*.—Takes an easterly direction towards the town of Alba, in the Upper Montferrat.

5. *Genoa to Fottri*.—Skirts the "Riviera di Ponente," and will, hereafter, become the first portion of the line between Genoa and the Var.

6. *Valenza to Vercelli*.—Starts from the Government station at Valenza (on the line from Alessandria to Arona), crosses the Po at Casale, and is intended to open a direct communication with the Provinces of Biella and Vercelli (where it joins the Novara line) for the Port of Genoa. The bridge over the Po not being yet completed, there is still a break in this line.

7. *Mortara to Vigevano*.—The object of this short branch was to open a more direct means of intercourse between Genoa and Milan; but there is no immediate prospect of the realization of this scheme, and the financial position of the company is consequently an unpromising one.

8. *Turin to Novara and the Lombard Frontier*.—This line has a terminus at Turin, separate from that of the Government. It follows the left bank of the Po, crossing all the affluents of that stream as they descend from the Alps, and joins the Government station at Novara. Thence is being continued to the frontier of Lombardy, a distance of about ten miles. There is a branch (not yet completed) from Chivasso to Ivrea, at the entrance of the Val d'Aosta; and another, already opened, from Santhia to Biella—the center of the cloth trade. A fusion has been agreed to between this company and the Victor Emanuel line; but the actual transfer of the Novara line to the latter has not yet been effected. Its 500 francs shares are now quoted at 720 francs, or 220 francs premium.

9. *Alessandria to Stradella*.—Promise to become a most lucrative line. It is yet only partially completed; starts from the Government station at Alessandria, traverses the plains on the right bank of the Rivers Tanaro and Po, crosses the Scrivia, touches the towns of Tortona and Voghera, and terminates at Stradella, where it will join the trunk line of Central and Southern Italy.

10. *Novi to Tortona*.—Is a short branch from the Government station at Novi, connecting Genoa with the Duchies.

11. *Alessandria to Acqui*.—Starts also from the Government station at Alessandria, and ascends the left bank of the Bormida to Acqui—a city renowned for its mineral water and mud. This line may, hereafter, be continued to Savona, on the coast.

12. *The Victor Emmanuel Company*.—Have undertaken to construct a line of railway from Modane in Savoy, near the foot of the Mont Cenis, to Culoz, on the Rhone, where it would join the French lines, with a branch from

Ayton to Annecy, of the aggregate length of 126 English miles, 53 miles of which, from St. Jean de Maurienne, in the Valley of the Arc, to Chambéry and Aix-les-Bains, are now open.

The portion between St. Jean de Maurienne and Modane will entail heavy works and steep gradients. Amongst the former are two bridges over the Arc, a deviation of the bed of that river, and eight tunnels, of the aggregate length of 2,300 yards, besides several high embankments of brickwork.

The section from Aix to Culoz will skirt the Lake of Bourget, cross some marshy ground necessitating a heavy outlay; will require several tunnels of the total length of 2,733 yards, a break-water of rocks for three miles, and a bridge over the Rhone 330 yards in length.

At Ayton, a branch detaches itself from the main line, and, after crossing the Arc and the Isere, reaches Albert Ville by an easy country. From Albert Ville it follows the course of the torrent Arly for some distance, and then, turning to the west, passes Faverges, and terminates at Annecy. The principal works are the bridges over the Arc and the Isere, two bridges over the Arly, and a tunnel of 1,620 yards in the vicinity of Lake of Annecy. This branch, which is 41 miles long, is intended to connect Piedmont and Genoa with Geneva and Western Switzerland.

The whole position and sphere of action of this company is, however, about to be reconsidered by the Sardinian Parliament.

A bill has recently been submitted to the Chamber of Deputies, authorizing the outlay necessary for the construction of the portion of the line between Susa and Bardonnèche, by the State, and for boring a tunnel through the Alps, under the Col de Frejos, midway between the Mont Thaber and the Mont Cenis, to be entered from the south at Bardonnèche, and from the north at Modane, in the valley of the Arc.

The tunnel will be approached from Susa by the valleys of the Dora and the Bardonnèche; will be adapted to a double line of rails; will be about eight English miles in length, and require seven years to complete, a method which I will shortly attempt to describe.

The estimated cost is 41,000,000 francs, 20,000,000 of which will be contributed by the Victor Emmanuel Railway Company in case of absolute success. Should the scheme be abandoned for any reason whatsoever, the company will be exonerated from any share in the outlay that may have been incurred.

In addition to the great cost of such an enterprise, an almost insuperable obstacle has hitherto been anticipated from the difficulty of ventilating a tunnel of such extent without sinking shafts, which the great height of the superincumbent mountain would have rendered all but impracticable.

Many plans have been suggested for overcoming this difficulty; but none were deemed feasible until the Piedmontese Engineers, Grattoni, Grandis, and Sommeiller, conceived a project which has, after mature examination, been adopted by Government.

The main feature of this plan is a machine denominated by its inventors a "hydro-pneumatic condenser," to be acted upon by a column of water fallen from a height and driving a volume of air into a receiver made of iron plates, and resembling an ordinary cylindrical steam-boiler. The air is thence carried by pipes in the required direction, and becomes available either for ventilation or as a motive power. Each stroke or pulsation caused by

the pressure of the water, forces a fresh supply of air into the receiver, the air being constantly maintained at the requisite degree of condensation (equal in this machine to six atmospheres) by the pressure of a second column of water, falling from a height of fifty-one metres, which is introduced into the receiver from below, and gradually sinks or rises, as the air is forced in or delivered for use.

Concurrently with this machine, it is proposed to adopt an invention of Mr. Bartlett, an English engineer (and modified by MM. Grattoni to suit their purposes), for perforating the hardest rocks, with far greater expedition than has yet been attained.

This "perforator" is moved by the compressed air, and may be said to consist of a powerful steel chisel attached to the end of a piston, which strikes the rock with a rotary motion at the rate of 270 blows per minute, in the required direction, perforating it in the usual manner to a depth of 12-67 centimetres in a minute, and thus performing twelve times the work of two average miners.

The water-power at Bardonnèche will, it has been ascertained, ensure the delivery of 4,085 metres cube of air per hour, at a distance of 6,500 metres from the machines (of which eighteen at each extremity will be requisite) by means of cast iron pipes; and this supply of air will suffice not only to work the perforators, but thoroughly to ventilate the tunnel to that distance for 167 men and the required number of lights, as well as to carry off the exhalations caused by the explosion, in blasting, of 80 kilogrammes of powder per hour; 132 metres cube of rock could thus be excavated daily; and this progress would be equivalent to an advance of the tunnel of 3 metres per diem.

The supply of water at the northern extremity (Modane) is said to be even more copious.

According to the present plan, seventeen of these perforators would operate simultaneously in the headings at both extremities of the tunnel, seven in front, and ten laterally in each heading. But improvements will, doubtless, be suggested by experience.

The greatest elevation is in the center of the projected tunnel, 1,335 metres (or 4,281 feet) above the level of the sea. On the southern side the gradients will be two in the one thousand; on the northern twenty-two in the one thousand.

When sanctioned by Parliament, the preliminary operations will be commenced at once; and in the meanwhile the hydro-pneumatic machine and perforators will be further improved, and employed, when ready, on the tasks respectfully allotted to them.

Competent judges differ so widely with respect to the practical value of the above scheme, that I shall not presume to express any opinion upon the subject; but even should the Sardinian Government be foiled in its object by unforeseen natural or mechanical obstacles, I think it will be admitted that the very attempt to carry into execution a project of such magnitude, with resources so limited as those at their command, is highly creditable to the spirit and enterprise of the country.

On the other hand the Government have been authorised to concede a line of railway, starting from the French frontier on the Var, and following the sea-coast by Nice and Genoa to Sarzana, on the Modenese frontier, the total length of which will be 320 kilometres, or about 200 miles; a gross receipt of 25,000 francs per kilometre is guaranteed to the company selected. In connection with this line,

a second railway from Turin to the coast (of about 91 miles) is in contemplation, and, on the opening of next season, the Cabinet will submit to Parliament the project which may be ultimately selected. Savona or Oneglia are at present considered the most eligible termini on the coast.

The average cost per mile of all the railways completed up to this time has been about 21,200*l*; but it will be evident, from previous statements, that, in a country varying so greatly in its physical conformation, no such average can give the least idea of the actual cost of a particular line.

In a report upon the railroads of the United States of America, Captain Douglas Galton estimated the cost of construction per mile of the New York and Massachusetts railroads at from 10,000*l* to 12,000*l*, as compared with 35,000*l* per mile for British railways.

The average I have given for Sardinian railways will, I think, admit of a not unfavorable comparison with the above figures, when it is considered that the natural obstacles encountered in this country are of a far more formidable character than usual. That the whole of the works are on the most substantial scale, and that in the plains of Piedmont the districts traversed are amongst the most fertile; and, consequently, that the purchase of land is a very heavy item in the outlay.

There are 453 miles of railway completed, and 197 in construction, giving a total of 650 miles.—*Register*.

AMERICAN CAST STEEL.

Although America possesses inexhaustible stores of the best iron ores for making all kinds of steel, yet very little of that useful metal is manufactured in this country in comparison with the amount imported from abroad; the annual amount thus imported being about thirteen thousand tons, the best qualities of which come from England. The iron from which the best steel in Sheffield is made is the product of Swedish magnetic ores, of which England is deficient, while similar ores are very abundant in the United States. Various unsuccessful attempts have been made to manufacture American cast steel; but Neville's process is now practiced in our country somewhat successfully. The nature of this process consists in fusing wrought iron with certain substances containing cyanogen. About twenty pounds of malleable iron broken into small pieces, are put into a crucible with ten ounces of charcoal, six of common table salt, or one-half ounce oxyd of manganese, one ounce of sal-ammoniac, and half an ounce of the ferrocyanide of potash. These being mixed together, the crucible containing them is introduced into the furnace, its contents thoroughly melted, the scum skimmed off, and the melting heat maintained for three hours, when the metal is ready to be poured out into the ingot molds. This process, it is stated, makes good cast steel, either for hammering or rolling. Good cast steel may also be made from scrap-iron, by smelting it in crucibles with three ounces of the oxyd of manganese, ten of charcoal dust, and one of lime, to thirty pounds of the iron. The operation of smelting requires about three hours, during which the scoria is carefully skimmed from the top of the crucible.—*Hunt's Magazine*.

The traffic of the Great Western Railway of Canada, for the week ending 4th of March, 1859, was as follows:

Receipts from passengers.....	\$18,498 13
Freight and Live Stock.....	20,390 61
Mail and Sundries.....	1 329 38
Total.....	40,428 62
Corresponding week, 1858.....	41,529 93

THE ATRATO CANAL.

Among the various schemes for the establishment of inter-oceanic communication across the Central American Isthmus, there is none offering advantages equal to those of the Atrato line. This proposed canal is through an open cut from the sea to the waters of a navigable river, having sufficient depth to float the largest man-of-war and merchant ships; and no locks or other impediments are required. It lies in the Republic of New Granada, in the province of Choco, between the seventh and eighth degrees of north latitude, and the seventy-seventh and seventy-eighth degrees of west longitude from Greenwich. It begins at a good harbor at the mouths of the Atrato river, in the Bay of Candalaria, thence ascends the Atrato river to one of its affluents.

In the early part of the present century, Baron Alexander Von Humboldt, in his "*Essays Politiques*," in describing the various routes for forming inter-oceanic navigation, designated the line of the valley of the Atrato river, as worthy of consideration. He came to this conclusion, from having personally examined this and the other proposed routes; and in his writings urges the merits of this particular line. The transit routes at Honduras and Tehuantepec, the canoe navigation at the lake Nicaragua, and the mule route at Panama, however, for many years drew off the attention of capitalists, from the route in question.

In 1850, General Mosquera, ex-President of the country, in a work entitled "*Physical and Political Geography of New Granada*," drew attention again to the valley of the Atrato, and a citizen of the United States, (Mr. Frederick M. Kelley,) appreciating the vast benefits to be derived to this country, and the world, from any good route across the Isthmus, but more particularly from any that could be made available for purposes of canalization, determined in 1853 to fit out an expedition at his own expense, and have surveys made, to see if the impressions of the illustrious men named were founded in fact or otherwise, which resulted in the discovery of a route, by which a canal could be built, to connect the waters of the Atlantic and Pacific Oceans *without locks*, and at such a cost as to be commercially available. These important results having been attained and brought to the attention of the Thirty-fourth Congress, the Government was authorized to detail officers for the survey of the Atrato route. These officers have returned, and we are informed, report favorably as to the practicability of the line. The importance of this canal to the United States and the maritime world, is illustrated by the following statistical calculations which we take from the Hon. E. Ward's speech on this subject in the House of Representatives: The total tonnage owned by the United States, that would use this canal, if constructed, is 1,857,485 tons. The cargoes are valued at \$100,294,687, and the ships at \$92,874,250; making a total amount of value afloat, belonging to the United States, of \$193,168,937. This includes the whale fishery, but not the precious metals from California. Upon this basis, taking the diminution of time as a basis, the benefit by the gain in sailing distance from one part of the world to the other, by the Atrato canal, estimating the saving by insurance, interest on money, wages of men, freight, wear and tear, it is estimated that the sum of \$35,995,930 would be saved to the United States alone, as follows:

Insurance on vessels and cargoes saved..... \$3,863,378
Interest saved on cargoes..... 3,008,840
Saving of wear and tear of ships, 5 per cent..... 4,643,712
Saving of freight money (by time)..... 11,250,000
Saving of wages, provisions, crew, &c..... 13,230,000

Total yearly saving to the United States..... \$35,995,930

We find the tonnage of England, that would pass this canal, is 1,029,295 tons; the value of tonnage and trade is \$990,649,750. The saving to England, upon the foregoing basis, would be \$9,950,348.

The tonnage of France that would pass the Atrato is 162,735 tons. The yearly saving to the trade of France, that would result from the use of the Atrato canal, would be \$2,183,930.

Of countries other than those named—the value of the trade and tonnage that would pass this communication is \$16,802,000; the saving would be about \$1,400,000.

The aggregate of the foregoing tonnage and trade is \$467,831,296; and the total saving is \$49,530,208 annually.

The statements are predicated upon the present state of commerce. The average increase for the last ten years was about one hundred and ten per cent., and it is fair to assume that the trade will increase one hundred per cent. in the next ten years, in which case it is estimated the saving to the world would be \$99,060,416.

Having included the trade in aggregate form, it is, perhaps, proper to say that there are many specific interests that would be greatly benefited. It is believed that the whaling fleet, for example, could go into the fishing grounds, and return with as much oil and bone as they do now in two-thirds of the time, and the coasting vessels of New England and the northeast could find employment in the Pacific, during the seasons they are now idle, procuring guano, &c.

The following table will show the saving in distances that would be effected by the completion of the Atrato canal:

From New York to—	Distance via Cape of Hope.	Distance via Cape Horn.	Distance via the Isthmus of Panama.	Saving in distance over the route by the Cape of Hope.	Saving in distance over the route by Cape Horn.
	Miles.	Miles.	Miles.	Miles.	Miles.
Calcutta.....	17,590	24,060	13,400	4,190	9,660
Canton.....	19,500	21,500	10,600	7,900	10,900
Shanghai.....	20,000	22,400	10,400	9,600	11,600
Valparaiso.....	12,900	4,800	.....	8,100	.....
Callao.....	13,360	3,500	.....	10,000	.....
Guayaquil.....	14,300	2,800	.....	11,500	.....
Panama.....	16,000	2,000	.....	14,000	.....
San Blas.....	17,800	3,800	.....	14,000	.....
Mazatlan.....	18,000	4,000	.....	14,000	.....
San Diego.....	18,500	4,000	.....	14,000	.....
San Francisco.....	19,000	5,000	.....	14,000	.....

The estimated cost of this project is \$73,687,141. To raise the requisite means Mr. Ward proposes that the United States should guarantee to pay interest at the rate of five per cent. upon the amount expended in the process of the work, from year to year, for the period of twelve years. The amounts in each, annually, would be as follows:

First year.....	\$150,000
Second year.....	40,000
Third year.....	80,000
Fourth year.....	1,250,000
Fifth year.....	1,700,000
Sixth year.....	2,150,000
Seventh year.....	2,600,000
Eighth year.....	3,150,000
Ninth year.....	3,750,000
Tenth year.....	3,750,000
Eleventh year.....	3,750,000
Twelfth year.....	3,750,000

Total interest money.....\$27,200,000

The above is based upon the supposition that this Government is the sole promoter. In case England and France joined, it would be for one-third the amount. The interest

being guaranteed by the United States, or in conjunction with England and France, it is believed that those engaged in the construction of the canal would be able to obtain the money necessary for their object upon the most favorable terms.—*Pennsylvanian*.

ANNUAL REPORT OF THE TRADE OF MILWAUKEE.

The Milwaukee *News*, of the 8th inst., contains an elaborate report, prepared under the direction of the Chamber of Commerce, of the trade of that city for the last year. The principal feature in the trade of that city, as also of the State of Wisconsin, is the traffic in grain, and the rapidity with which this business has grown is quite remarkable, as an exhibit of the agricultural progress of that section of our western country.

Up to 1841, no grain had been shipped from the State of Wisconsin, and the receipts at Milwaukee for the year 1844, were not equal to the amount now received in a single day. Here, then, we have the starting point of the grain trade of that State, and the figures for the last year show the changes that have taken place since 1841. We annex a comparative statement of the exports of wheat and other grain for several years:

	Wheat.	Corn.	Oats.	Barley.
1851.....	317,285	13,628	78,922	103,840
1852.....	564,404	2,220	363,841	322,621
1853.....	656,763	270	131,716	291,800
1854.....	1,889,452	164,008	404,909	331,399
1855.....	2,641,746	112,132	13,633	63,379
1856.....	2,761,679	218	5,433	10,398
1857.....	2,581,311	472	5,65	600
1858.....	3,994,213	43,958	562,067	63,178

The receipts of wheat for the year 1858, were 4,876,177, of which the City Mills consumed 750,535 bush., and 131,429 bush. remained on hand January 1st.

The shipment of flour for eight years were as follows:

1851.....	51,889
1852.....	92,995
1853.....	104,055
1854.....	145,133
1855.....	181,569
1856.....	188,415
1857.....	228,422
1858.....	298,658

The report estimates the wheat crop of the State, for 1858, one-third less than that of the previous year. A large proportion of the crop of 1857 was held over and shipped in 1858, and the stocks in the country are now very small, so that even with a good crop in 1859, it is not probable that the business of the current year will show any increase over the last.

The number of Hogs packed this season is stated at 35,961 head, against 10,000 last year. Number of beef cattle packed this season, 4,976.

Lumber is another important item in the trade of Milwaukee. The receipts for eight years were:

	Lumber, feet.	Lath, feet.	Shingles, No.
1853.....	15,346,000	1,197,000	4,141,000
1854.....	27,753,000	4,541,000	7,099,000
1855.....	48,377,000	16,833,000	22,162,000
1856.....	63,498,000	5,202,000	11,529,000
1857.....	71,035,000	9,570,000	21,331,000
1858.....	45,536,975	6,219,000	17,569,000

The stock on hand January 1st, 1859, was 19,871,776 feet of lumber; 3,420,749 do. lath; and 3,637,250 shingles.

The value of flour and grain exported from Milwaukee last year was \$4,533,725.

The following tables show the amount of flour and grain shipped from the Lake ports of Wisconsin, during the past year:

	Milwaukee.	Racine.	Kenosha.
Flour, bbls.....	298,688	10,136	991
Wheat, bush.....	3,991,213	913,376	191,431
Oats, bush.....	562,067	60,216	33,559
Corn, bush.....	43,953	10,366	.....
Barley, bush.....	51,451	4,794	8,640
Rye, bush.....	5,374	1,600	.....
*Total bushels.....	6,155,507	1,085,132	238,817

	Sheboygan.	Pt. Washington.
Flour, bbls.....	15,262	4,113
Wheat, bush.....	169,515	8,113
Oats, bush.....	17,876	638
Corn, bush.....	.....	.....
Barley, bush.....	.....	2,662
Rye, bush.....	2,242	161
*Total bushels.....	206,173	21,759

Total shipments from Wisconsin Lake ports:

Flour, bbls.....	329,220
Wheat, bush.....	5,216,480
Oats, bush.....	674,766
Corn, bush.....	51,324
Barley, bush.....	115,967
Rye, bush.....	8,781

Total number bushels of grain and flour reduced, shipped..... 7,717,288

PUBLIC MEETING.

(From the Asheville News.)

At a meeting of the citizens of Asheville and vicinity, held at the Court House on the 23d February, 1859, A. S. Merriman, Esq., was called to the Chair, and R. B. Vance was requested to act as Secretary.

The Chairman explained the object of the meeting to be for general consultation concerning our works of internal improvement, and that our Representatives to the late Legislature might have an opportunity to explain the action of that body in relation thereto.

Dr. J. S. T. Baird, our Commoner, being detained at home, N. W. Woodfin, Esq., who has spent most of the winter in Raleigh, was called upon to favor the meeting with an account of the proceedings of the General Assembly in which we are interested, &c.

Mr. Woodfin proceeded to review the charters of the Western North Carolina Railroad, and the French Broad Railroad—that the first because of its charter provisions, can only be built by sections, which feature the late Legislature refused to change, and which left the road almost beyond the hope of our people, and he sincerely trusted no citizen of Buncombe would ever pay a dollar for its further extension west;—that the French broad charter was a good one, with the exception of the gauge, which after all was not so serious a difficulty as at first might appear. Mr. Woodfin argued the impracticability of connecting at the present day with Wilmington and Rutherford Railroad—that four million dollars had already been appropriated by the State for the Western Extension, and that the State would not vote money to penetrate the Blue Ridge at two points only twenty miles distant. The speaker detailed at length the causes which produced the failure of our railroad schemes in the late Legislature, and gave it as his opinion that the people of Western North Carolina will never get their rights under the present basis of representation, and system of Taxation—that the true system of taxation was the ad valorem.—Mr. W. said, in view of the facts, that it was useless to lament over that which was lost, that we must now turn eyes to the erection of the French Broad Railroad by county subscriptions, which the amended charter provides for, and proposed that we commence work simultaneously at the South Carolina line, in the direction of Spartanburg, and grade the road to Columbus, in the county of Polk, and at the Tennessee line in the direction of Morristown, and grade to Marshall in the county of Madison, with a view finally to connect both ends of the road at Asheville, and that he had no doubt, this work once began, that all restrictions on the charter would at once be removed.

On motion of Wm. Murdoch, Esq., the Chairman appointed a committee of twelve gentlemen, to recommend what action is necessary for our people to take in the premises, viz:

Wm. Murdoch, N. W. Woodfin, J. F. E. Hardy, Marcus Erwin, J. W. Patton, R. B. Vance, J. E. Patton, T. W. Atkin, W. A. Patton, B. J. Smith, E. Clayton, I. B. Sawyer.

Marcus Erwin, Esq., was then called for, who responded by declaring his readiness to aid in carrying out the plan suggested by Mr. Woodfin,—that he had thought the prospects for a Railroad in the French Broad Valley were destroyed, but that the plan presented met his approval, and he believed it could be carried out; that he thought the citizens of Buncombe would warmly respond to the proposition.

Mr. E. said he was unwilling to wait 15 or 20 years for a railroad to come to him,—that he did not consider the failure of our projects in the Legislature as chargeable upon any political party, but as more easily to be accounted for on the score of sectional feelings. Mr. E. thought that our people could at once build this road if they would take hold of it.

Rev. T. W. Atkin was called out, who said that he had feared our situation was hopeless; that he had come to the meeting for information, and had been highly gratified to hear the speech of Mr. Woodfin, and thought his plan for building the French Broad road feasible; that he hoped the Western North Carolina Railroad would stop at Morganton—that no citizen of Buncombe would ever subscribe a dollar to move it, and that he believed the noble spirited people of this county would cheerfully submit to a tax to build themselves a road, as they had so submitted to build roads for others.

David Coleman, Esq., was called upon for his views. He said he had been unwilling to address the meeting, not having any plan formed;—that he had thought a great deal about the matter;—we had held Conventions, and still the question was, what shall be done?—that he thought we ought to get in earnest about the matter and adopt a plan. Mr. C. thought that Mr. Woodfin's plan was the proper one, and could be carried out; that the road should be begun at once, which was the surest way to secure its completion.

The Chairman made a few remarks, stating that we, as a people, had once thought ourselves free, but that it appeared a portion of the State did not want us to be so, and that he was well satisfied if anything ever was done for this section, we must do it ourselves. Mr. M. argued that the gauge of the road was not so great a difficulty as some thought; that the gauge of the road could be the same from Spartanburg to Asheville, and from here to Cincinnati, thus making only two reshipments on a road one thousand miles long, from Cincinnati to Charleston. Mr. M. suggested that the President of the French Broad Railroad Company should at once call the Directors together, and they the Stockholders, and that our people should be addressed on the subject, South Carolina and Tennessee visited, and our plans laid before the people of those States.

The following resolution was offered and passed unanimously, to wit:

Resolved, That it is the sense of this meeting that the President and Directors of the French Broad Railroad Company be requested to take immediate action in bringing the subject of County subscriptions before the people, and for a vigorous prosecution of the work, commencing at both ends of the road simultaneously.

On motion, the Secretary was directed to furnish a copy of these proceedings for publication in the "Asheville News," and that the Hendersonville, and other papers friendly to the enterprise, be requested to copy.

A. S. MERRIMON, Ch'n.

R. B. VANCE, Sec'y.

REDUCTION OF POSTAGE TO WURTEMBERG, GERMANY.—The single rate of letter postage between United States and Wurtemberg, via Bremen or Hamburg mail, will in future be 15 cents the single rate, prepayment optional. The rate by the Bremen and Hamburg lines has hitherto been 22 cents. The reduction results from the act of the Kingdom of Wurtemberg, in joining the German-Austrian Postal Union.

With reference to Butter the report says:

The trade in butter is likewise becoming quite important, as during the past year this city has exported instead of importing, which had been the case for several years previous. During 1858 and 1857 large quantities of Ohio and New York Butter were brought here, for consumption and shipment into the interior. As will be seen by the receipts, we have received, during the past year, several hundred thousand pounds, much of which has been shipped eastward. Canada has been quite a market for this product, and a considerable quantity has gone there.

The receipts of butter for the year were 349,929 pounds, and the shipments 138,858 pounds.

The receipts of Cranberries were 7,744 barrels. These were mostly shipped to Cincinnati, Chicago and Cleveland.

The report says of Wool:

The wool trade for the past year shows a decrease as compared with former years, and is only to be accounted for by the extreme prostration of manufactures all over the country, lessening the amount consumed very materially. At the opening of the season, which did not take place until the latter part of June, some weeks later than usual, which was caused by the rainy spring weather, there was a prevailing impression here that prices would rule very low. Consequently the market opened quite dull, and it was not until it was discovered that agents of eastern firms were traversing the country, buying up all they could get, at prices higher than were paid here, that the market improved to any extent. We give below the prices of wool for two years in this market:

	1857.	1858.
	Com. to 2 to Full Blood.	Com. to 2 to Full Blood.
June.....	20@28c 29@35c	18@24c 26@30c.
July.....	27 73c 33 42c	20 26c 30 35c.
August.....	28 35c 35 45c	23 28c 34 40c.

The shipments of wool for 1858, by Railroad and by Lake, are as follows:

By Lake, lbs.....	385,336
By Milwaukee and Chicago Railroad, lbs.....	54,553
Total.....	439,913

The receipts of the Mississippi and Tennessee Road for the five months ending with February, were:

Receipts from Passengers.....	\$32,168 24
Receipts from Freight.....	72,667 68
Total.....	\$105,035 92

*Flour reduced to Wheat.

RAILROAD DECISION.

Important Decision of the Supreme Court, Affirming the Validity of Bonds Issued by Knox County, Ind., in aid of the Ohio and Mississippi Road.

The case of Wm. H. Aspinwall et al against Knox Co., Ind., was decided last week. The decision sustains that of the District Court, in favor of Aspinwall and his associates, thereby making good their just claim of \$142,000. The question in dispute was the legality of the issue of the bonds—Knox county issued \$200,000 to the railroad. It is believed that the people of Vincennes and of the county will scorn any attempt to repudiate or to delay making arrangements for the payment of interest on their bonds, as they have been immensely the gainers by the building of that great road through their midst.—No county in Indiana is advancing faster in material wealth than Knox, and any attempt to repudiate the very small amount of her contribution to the highway that has enriched her and brought her population in line with the East and West movement, would inflict an irreparable injury upon the town as well as the county.

The annual report of the Madison and Indianapolis Road has been published. The business for 1858 was as follows:

RECEIPTS.	
From Passengers.....	\$51,790 37
From Freight.....	117,228 16
From Mails and Express.....	6,359 67
From Jeffersonville Railroad.....	28,666 52
From sundry resources.....	2,669 44
Total.....	\$206,114 16
EXPENDITURES.	
Repairs of Road.....	\$37,526 22
Repairs of Cars and Machinery.....	24,767 70
Running Road.....	26,095 54
Miscellaneous.....	35,0 2 31
	123,481 78

Net earnings (40 per cent.).....	\$82,632 38
The receipts of the Company from all sources during the year were:	
From Transportation as above.....	\$206,114 16
From 37 income bonds at par.....	37,000 00
From first mortgage interest bonds.....	61,320 00
From Income mortgage interest bonds.....	49,420 00
From sales of old iron and real estate.....	7,995 46
From other sources.....	3,186 37
Total.....	\$364,135 99

And the disbursements:	
Current expenditures as above.....	\$123,481 78
Taxes.....	6,847 78
Interest.....	130,518 73
Real Estate, new foundry, etc.....	2,665 48
Dividend Scrip.....	30,656 74
Bills payable, almost.....	51,908 05
Miscellaneous.....	15,050 62
Balance in Treasury and due Treasurer.....	3,027 31
Total.....	\$364,135 99

The following is a comparative statement of the earnings and expenditures for four years:

1855.....	\$368,103 73	\$199,251 33
1856.....	270,317 66	164,369 19
1857.....	212,664 40	149,249 96
1858.....	216,114 16	123,481 78

THE GROWING WHEAT CROP.—During February, croaking was carried on pretty extensively regarding the wheat crop; in some sections it was reported "drowned" out, and in others frozen out; and speculation in flour was stimulated by those reports, to no inconsiderable extent. It is rarely that wheat is winter killed, and it seems strange that farmers should so dread that which experience shows but seldom takes place. From the time wheat "shoots" until it is cut and saved from the action of the weather, is that in which it is in greatest danger, and in which the wheat crop is injured, or destroyed, almost, whenever such is the case. The advices we have from the various sections of the country, leave no doubt in our minds that a large quantity of wheat has been sown, and that it looks well; and in point of growth, is a month earlier than it was at this season the last three years. From present appearances, a dry, cool May, will be absolutely necessary to mature the crop properly, and with favorable weather during that month and June, a large wheat crop may be expected.

The following is the time table as adopted by the meeting of Representatives of the New York Central with connecting or neutral lines, at Buffalo on Friday:

The sub-convention was called to order by appointing C. G. Hammond Chairman, and John Campbell Secretary. It was agreed that trains leave New York as follows:

1st Train—Leave New York at.....	6.00 a m.
Arrive at Bridge and Buffalo.....	10.00 p m.
Chicago.....	7.00 p m.
2d Train—Leave New York.....	11.00 a m.
Arrive at Buffalo.....	4.00 a m.
Chicago.....	11.55 p m.
3d Train—Leave New York.....	5.10 p m.
Arrive at Buffalo.....	10.00 a m.
Chicago.....	7.00 a m.
To Leave Chicago as follows:	
1st Train—Leave Chicago at.....	8.00 a m.
Arrive at Bridge and Buffalo.....	4.45 Buf. time.
Leave Buffalo and Bridge.....	5.15 a m.
Arrive at Albany.....	3.30 p m.
New York.....	9.30 p m.
2d Train—Leave Chicago at.....	8.00 p m.
Arrive at Buffalo and Bridge.....	5.20 p m.
Leave Buffalo.....	6.00 p m.
Arrive at Albany.....	4.30 a m.
New York.....	10.00 a m.

CINCINNATI EXPRESS.	
Leave Cincinnati at.....	6.00 a m.
Arrive at Cleveland.....	3.00 p m.
Leave.....	3.35 p m.
Arrive at Buffalo.....	10.30 Buf. time.
Leave Buffalo.....	11.00 p m.
Arrive at Albany.....	9.15 a m.
New York.....	3.30 p m.

All other Cincinnati trains going East, connect at Cleveland with trains from Chicago. To take effect April 4th, 1859.

PENNSYLVANIA RAILROAD COMPANY IN ACCOUNT WITH THE COMMONWEALTH OF PENNSYLVANIA.—The following statement is from the report just made to the Legislature, by the Auditor General:

For tax on capital stock, per act of April 29, 1844, from September 1, 1849, to the first Monday of November, 1857; the said tax being estimated under the provisions of the fourteenth section of the act of March 30, 1811, except the year 1856, for which the company furnished the necessary data to determine the proper amount of tax:

	Cap. Stock paid in.	Mills.	Tax.
1849.....	\$3,332,035.	0.	\$1,511 01
1850.....	5,822,210.	3.	17,466 63
1851.....	8,103,465.	3.	24,310 29
1852.....	9,768,135.	3.	29,304 46
1853.....	11,228,020.	3.	33,684 06
1854.....	12,101,820.	3.	39,314 46
1855.....	12,300,000.	3.	36,900 00
1857.....	13,206,625.	3.	39,619 67

Add five per cent. under the said act of 1841.....	10,970 54
1856 dividends eight per cent. on \$12,586,625, tax 4 mills.....	50,246 00
Total.....	\$280,727 92

CR.	
By payment to Treasury Jan. 31, 1857.....	\$42,065 32
By payment to Treasury Dec. 17, 1857.....	31,597 62
	73,662 94

Balance due Commonwealth.....	\$207,064 98
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SALE OF LOUISVILLE AND NASHVILLE R. R. BONDS.—The Hon. James Guthrie has sold 1,018 of the first mortgage bonds of the Louisville and Nashville R. R., amounting to \$1,018,000. He has made these sales right here at home among our own capitalists, without going to Europe or even to New York for help. Such financial ability as Mr. Guthrie has shown in these sales, places the early completion of the Louisville and Nashville Railroad beyond a doubt. We shall have the iron horse darting from here to Nashville by next new year's day, and Mr. Guthrie can ride on the Louisville and Nashville Railroad, from here to Nashville, on his way to the Charleston Convention, in the spring of 1860, to be nominated for the presidency. Such a financier is just what we want for the next Presidential campaign, and we must have him.—*Louisville Courier*, 22d.

Freight Tariff Reported at Buffalo—The Question that Broke up the Convention.

The special class is abolished, and classes 4 and 5 are the same.

The following all rail rates were agreed upon taking New York as the starting point:

New York to	1st class	2d	3d	4th.
Cincinnati, Dayton and Piqua.....	125	100	80	56
Milwaukee via Chicago.....	135	115	105	70
Milwaukee via G. Haven.....	150	110	100	65
Indianapolis.....	125	110	85	59
Terre Haute.....	160	130	100	74
Springfield and Urbana, Ohio.....	120	95	78	54
Columbus and Newark.....	115	90	70	50
Louisville.....	140	115	90	66
Jeffersonville.....	135	110	85	61
Evansville.....	175	135	120	80
Vincennes.....	165	125	110	75
St. Louis.....	180	135	120	80
Cairo.....	180	135	120	80
Alton.....	175	130	115	75
Quincy.....	180	135	120	80
Chicago.....	150	110	100	65
Springfield, Ill.....	175	140	115	75
New Albany.....	145	120	95	71
Madison, Ind.....	140	115	90	66
Naples and Jacksonville.....	180	135	110	80
Decatur.....	175	130	115	75
Bloomington.....	180	135	120	85
Lafayette.....	148	120	93	67
Cleveland.....	89	72	58	41
Sandusky.....	106	80	66	47
Toledo.....	110	85	75	50
Detroit.....	110	85	75	50
Fort Wayne.....	128	98	85	58
Logansport.....	142	113	96	68
Crestline.....	105	85	65	50
Jackson.....	140	110	95	65
Peru, Ind.....	140	110	95	67
Bellefontaine and Forest.....	120	95	78	54
Attica and Williamsport.....	151	120	101	72

A resolution was also adopted by the Committee, to the effect that the first, second and third class Eastward, to be same as Westward. This table of rates to take effect March 25th.

At a meeting of the holders and representatives of the Racine City Bonds, issued to the Racine & Mississippi Railroad Company, held at No. 44 Exchange place, New York, on the 5th inst., \$160,000 bonds represented, Mr. Charles Luling, Chairman, and Mr. H. S. Mygatt, Secretary, the following preamble and resolutions were offered and passed unanimously:

WHEREAS, Certain citizens of Racine have sued out an injunction to prevent the collection of the tax levied to pay the interest on the bonds of that city issued to the Racine and Mississippi Railroad Company; and

WHEREAS, That injunction has been granted by the Courts of the State of Wisconsin, thus depriving the bondholders of their interest, and endangering their property; therefore,

Resolved, That the bondholders here present appoint Mr. A. S. Beckwith, of Hartford, and Mr. Charles Luling, of New York, a Committee to take all steps that may appear advisable and necessary to them to protect the rights of the bondholders, either in the Courts of the State of Wisconsin or of the United States, to engage legal counsel, and to incur all reasonable and necessary expenses.

The following are the earnings of the Baltimore and Ohio Railroad for February:

	Main Stem.	N. W. Va.	Wash. B'ch.	Total.
1859.....	\$364,954 11	\$19,911 97	\$36,524 72	\$321,391 10
1858.....	230,592 58	16,307 56	33,473 82	280,373 96

Inc.... \$34,361 63 3,604 41 3,050 90 41,017 14
This shows a total increase over last February of \$41,017 14.

The revenue on the Road, for the fiscal year so far, is as follows:

1858—October.....	\$378,503 32
November.....	283,119 22
December.....	336,361 01
1859—January.....	327,176 63
February.....	321,391 10

Total.....\$1,761,900 98

eb4tf

LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY, NOVEMBER 29th, 1859, Trains leave Cincinnati as follows:

9 A. M. DAY EXPRESS—Stopping at Way Stations.

4:15 P. M. ACCOMMODATION—For Xenia and Springfield, stopping at intermediate stations.

11:30 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Corwin, Xenia, and London.

Connections are made by the 9 A. M., and 11:30 P. M. Trains for

ALL THE EASTERN CITIES.

The NIGHT EXPRESS Train leaving Cincinnati at 11:30 P. M., runs daily, except SATURDAYS. The other trains run daily, except SUNDAYS.

FOR THROUGH TICKETS

And all information, apply at the Offices, Walnut Street House, bet. Sixth and Seventh; No. 1. Barnet House; south-east corner of Broadway and Front streets, and at the Eastern Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Superintendent.

Omnibus calls for passengers.

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by
March 1-53.
Feb. 25, 1859.

VOSE, LIVINGSTON & CO.,
9 South William St., N. Y.

1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-10th. Corby, Gossin & Co.'s make, for sale very low by
TRABER & AUBERY,
7 Public Landing

A Book for Every Business Man!

JUST PUBLISHED

—THE—

POST-OFFICE GUIDE!

For Post-Masters and Business Men.

CONTAINING

A Complete List of Post-Offices in the United States and Territories, arranged by States and Counties; A Complete List of all Distributing Post-Offices; Rates of Foreign and Domestic Letter Postage; Rates of Printed Matter, Transient and Regular; Abstract of the Laws and Regulations of the Post-Office Department, &c., &c.

COMPILED BY E. PENROSE JONES,
Late Assistant Post-Master at Cincinnati.

Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.

U. S. BLANK AGENCY, CINCINNATI POST-OFFICE,
January, 1859.

This work has been carefully compiled and corrected by E. PENROSE JONES, Esq., late Assistant Post-Master of the Cincinnati P. O., from the Records in this Department, and other sources, and contains the most complete list of Post-Offices, especially of the Western, North-Western, and South-Western States, yet published.

MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an actavo pamphlet of about 100 pages. The entire matter is kept standing in type, and as the compiler is promptly advised of all New Offices, Changes and Regulations of the Department, the information is corrected up to the last day of publication, an advantage possessed by no other work of the kind.

Observe, That this list is arranged by States and Counties, making it especially valuable to business men. No similar arrangement has been published since 1856. There are 300 more offices in this than in any book heretofore issued. The Price is one-half that of any work of the kind now published.

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Address,

C. S. WILLIAMS,
194 Walnut Street,
Cincinnati, Ohio.

Mar 10, 1859.

McCALLUM, BRISTOL & CO., BRIDGE & DEPOT BUILDERS.

McCallum, Bristol & Co., are prepared to construct McCallum's PATENT INFLEXIBLE ARCH TRUSS BRIDGE, for Railroad and Highway purposes at any point in Ohio, Indiana, Illinois, Missouri, Iowa, Wisconsin and Minnesota on as favorable terms as any other bridge, and in the most approved and perfect manner. Parties designing information, will please apply to the firm at their Office 99 Third St., Cincinnati, or to McCallum, Seymour & Hawley, No. 110 Broadway, N. Y. Ag. 26.

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.
SOLE IMPORTERS.

PROSSER'S PATENT SURFACE CONDENSERS for high pressure steam, with sea or other bad boiler water, gauges, 3-cutter drills, counter-sinks, tube end cutting bars, expanders, tube scalers, steel wire and whalebone brushes, pull lever wrenches, tubes—plain or enameled, screwed together for Artesian Wells, Hollow Slabs for various purposes. Steel for Rollers.
THOS. PROSSER & SON,
27 Jan. 28 Platt Street, New York.

LANE & BODLEY MANUFACTURERS OF WOOD WORKING MACHINERY, AND CIRCULAR SAW MILLS.

Lane & Bodley's celebrated Power Mortising Machine and all Machinery used in Rail Car Shops.
Corner John and Water Sts., CINCINNATI, O.
Jan. 5, 1859.

WRIGHTSON & CO., BOOK & JOB PRINTERS, NO. 167 WALNUT STREET, CINCINNATI, O.

Public attention is respectfully directed to this establishment, in the assurance that ample satisfaction will be given as regards Typography, Press Work, and Charges, to those who may require Ornamental, Common, or Book Printing, Printing from Stereotype Plates. We are better prepared to do business in this line than other house in the West.

Druggists Labels,

Are printed in the neatest manner, in Gold Silver, or Copper Bronze, on Satin, Splendid Glazed Colored Papers, or Cards, unequalled for brilliancy, at very low prices.

1858 CINCINNATI AND ST. LOUIS. Through without Change of Cars, OHIO & MISSISSIPPI (BROAD GAUGE)

RAILROAD.

TWO DAILY TRAINS FOR
Louisville, Vincennes, Evansville,
Cairo, and St. Louis,
At 9:00 A. M. and 10:30 P. M.,

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M.
ACCOMMODATION TRAIN at 5:20 P. M., daily, (Sundays excepted,) for Seymour.

FOR THROUGH TICKETS

To all points West and South please apply at the Union offices, No. 2 Burnet House; south-east corner Broadway and Front street, and at the Depot, corner Front and Mill streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

MOSELEY'S TUBULAR WROUGHT IRON



ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs, are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeting always Iron.

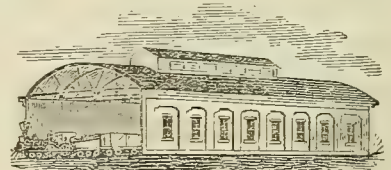
The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges.

We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.
Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

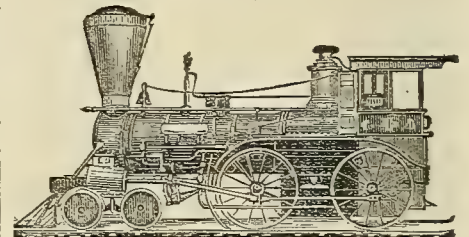
Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O.
may 13. MOSELEY & CO.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap. 20

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The course of study is that taught in the best Colleges, but more extended in Mathematics, Mechanics, Machines, Construction, Agricultural Chemistry and Mining Geology; also in English Literature, Historical Readings, and Modern Languages, accompanied by daily and regulated exercise.

Schools of Architecture, Engineering, Commerce, Medicine, and Law, admit of selecting studies to suit time means, and object of Professional preparation, both before and after graduating.

The twelfth annual term is now open. Charges, \$102 per half-yearly session, payable in advance.

Address the Superintendent, at "Military Institute, Franklin Springs, Ky.," or the undersigned.

P. DUDLEY.

President of the Board.

Jan. 5, 1859.

Union Works, Baltimore.**POOLE & HUNT,
Iron Founders & General Machinists,**

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.
HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

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**ANDERSON, GATES & WRIGHT,
STATIONERS, BOOKSELLERS,**

—AND—

**Blank Book Manufacturers,
No. 112 MAIN STREET,**

East Side, between Third and Fourth Streets,
KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,
Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

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Locomotive Works,
SCHENECTADY, N. Y.**

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,**AND TENDERS, AND
RAILROAD MACHINERY**

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding the work to any part of the country, without delay.

JOHN ELLIS, Agent.
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N. B.—We have two Freight Engines on hand suitable for the 4 feet 10 in. gauge. Cylinders 16 inches diameter, 22 inches stroke. Driving wheels 4½ feet diam. December 18th, 1856.

**D. M. CARHART,
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THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builders.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address:
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EITHER SINGLE OR DOUBLE PLATE.

WITH OR WITHOUT AXLES.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms. ap2

TUBULAR RAIL.

surface as solid rails of 60 lbs. per yard.

its density is greater.
Its welding nearer perfect, and
Its durability superior.

Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

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SOLICITOR OF PATENTS,

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TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood, and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the

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TWO TRAINS

Leave Wheeling daily, at 12:30 P. M., and 10:26 P. M.

Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.

Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone, by other lines.

Time as quick and fare as low as via any other Route.

Inquire for tickets via the Baltimore and Ohio Railroad, at any of the principal Railroad Offices in the West.

E. F. FULLER, Gen'l Western Agent.

L. M. COLE, General Ticket Agent.

W. P. SMITH, Master Transportation.

HOYT'S WATER GAUGE

Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high-pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

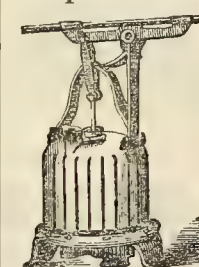
CHARLES W. COPELAND, Gen. Agent,
No. 66 Broadway, N. Y.

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP**AND
Compound Steam Pumping Engine,**

WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps, as the best Pump now in use, and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855—13

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The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of Steam Vessels, Engines, Boilers, Mill Work, &c.

Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description.

While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for ASHCROFT'S STRAIN GAUGE, ALLEN AND NOYES METALLIC SELF ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK,

Also, for Water Gauges, Indicators, Steam Whistler CHAS. W. COPELAND,

Consulting Engineer,
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CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned, **THEODORE DEHON,**

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READ THIS!

I have, at the request of Messrs. Cook, Merritt & Brown, Wholesale Stationers, 18 Beekman Street, New York, analysed two samples of FLUID INK, one marked *Arnold's Chemical Writing Fluid, P. & J. Arnold, London*. The other—BUTLER'S MERCANTILE RECORD FLUID, CINCINNATI.

I find both of these INKS to contain the same ingredients, and in the same state of combination. From the result of the various tests to which I have subjected them, I find that they are equal in *quality as well as durability*.

JAMES R. CHILTON, M. D., *Chemist*.

New York, November 9, 1859.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. **RECORD.**—For Ledgers and Records Only. **MERCANTILE.**—For Books, Letters, and General Purposes. **COPYING.**—For Letter Press only. Have had awarded them Fourteen Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

Transportation Office, Cincinnati, Hamilton and Dayton Railroad.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to *excel* any thing of the kind we have *ever* used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial.

Yours, truly,

J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio & Mississippi; Central Ohio; Baltimore & Ohio; Jackson and Vicksburg; Bellefontaine and Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena and Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B.—Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

GENERAL RAILWAY SUPPLY AGENCY.

SNOOK & HILL'S PATENT

LOCOMOTIVE LAMPS.

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NEW YORK.

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MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

RAILROAD ENGINES & CARS,

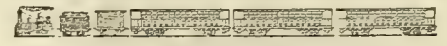
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HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,

JUDSON'S GOVERNOR VALVE.

Orders solicited and promptly filled.

Cincinnati, Hamilton and Dayton,



RAILROAD.

FOUR TRAINS

LEAVE THE SIXTH STREET DEPOT DAILY.

TRAINS RUN THROUGH TO RICHMOND, LIMA,
SANDUSKY, AND DELAWARE WITHOUT
CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND
NORTH-WESTERN CITIES.

6 A. M. MAIL TRAIN, connects at Dayton with Sandusky, Dayton and Cincinnati Road, for Springfield and Sandusky—at CLEVELAND, for Columbus—at CLEVELAND, for Cleveland and Buffalo, Toledo, Detroit and Chicago, arriving at Detroit at 5:30 P. M. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Munice. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

8:40 A. M. TRAIN, for Cleveland and Pittsburgh, via Delaware, makes close connection at CLEVELAND, for Pittsburgh, Baltimore, Philadelphia, and New York; and at CLEVELAND for Dunkirk, Buffalo, Boston and New York.

4:30 P. M. TRAIN, for Springfield and Sandusky—connects at FOREST, for Chicago—at CLYDE, for Toledo—at SANDUSKY, for Cleveland and the East. Connects also at DAYTON, for Troy, Piqua, Sidney, Lima, and Chicago—at SIDNEY, for Pittsburgh and the East. Also connects at RICHMOND, for Indianapolis, Terre Haute, St. Louis and Chicago.

5:40 P. M. TRAIN, for Hamilton and all way stations.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; No. 3 Burnet House; or at the Sixth Street Depot.

D. McLAREN, Superintendent.

GEO. H. KNIGHT & BROTHER,
Patent Attorneys,

N. E. Corner Vine & 4th.

A CARD.

I take pleasure in announcing that all difficulties between my former partners, in the firm of APPLEGATE & Co., and myself have been amicably adjusted. The business will be continued by them, at the old stand, they settling all the business connected with the firm.

I do not hesitate to recommend my friends to make their purchases of them, as I believe they will find it to their advantage to do so.

JOHN B. RYAN,
Late of the Firm of APPLEGATE & Co.,
Booksellers and Stationers.
Cincinnati, March 1st, 1859.

In referring to the above Card, we take the opportunity of saying to our friends and the public, that the business as heretofore conducted by us, will be continued at the same place and under the same name and style as formerly.

Our stock is very large and varied, having just been replenished for our spring sale. We are prepared to fill all orders, at lowest prices, with promptness and dispatch, guaranteeing satisfaction to all who may favor us with their orders.

We trust by continued exertions to merit a continuance of past favors.

JAMES APPLEGATE,
SAM'L FLICKINGER,
ARTHUR H. POUNSFORD.
Cincinnati, March 1st, 1859.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Drills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio
LEE & LEAVITT

The Railroad Record.

E. D. MANSFIELD, . . . } Editors.
T. WRIGHTSON, . . . }

CINCINNATI:

Thursday Morning, March 30, 1859.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

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A square is the space occupied by ten lines of Nonpareil.

One square, single insertion,.....	\$1 00
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“ “ per annum,.....	60 00
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“ “ six months,.....	110 00
“ “ per annum,.....	200 00

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If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

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If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

¶ The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

¶ Railroad Presidents, Superintendents and Secretaries, are requested to send us copies of all Annual and other Reports they may issue, together with their Monthly Statements, and such other matters of interest as they may be willing to furnish us

To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

THE WEEKLY ARIZONIAN—Is the title of a neat little paper, the first number of which is just received. It is conducted by W. Wrightson, Esq., our former associate in the *Record* and although printed beyond the outposts of civilization, compares favorably, in mechanical execution, with the issues of our old established papers. We trust that this “light shining in a dark place” is the harbinger of good news, and that our friends in this far off wilderness will meet with rich reward for their enterprise and toils. It is but a very few years ago, since the first golden rays of the rising glory of California fell upon us, and we doubt not, in a much shorter period the “silver ring” of her younger sister Arizonia will produce a melody in eastern states equally rapturous.

Tubac.—Terms \$3.00 per year.

THE ARTESIAN WELL AT COLUMBUS.—The artesian well is 1,933 feet deep. The contractors have discovered no new signs of water for the past two weeks.

RAILROAD CONVENTIONS & TIME TABLES.

The reader has seen, in the last two or three years, various reports of Railroad Conventions; of compacts made, and compacts broken. The result of all these proceedings has by no means redounded to the credit of those engaged; we mean, in public approbation. In the first place, the railroad managers, two or three years since, *reduced the speed of passenger trains*, and so far reduced the accommodation afforded the public. This was not very satisfactory, but, if reasonable, certainly ought to be acquiesced in. The public did acquiesce, but probably thought no better of Railroad Managers. Here, we may ask—*was there a good reason?* For passenger trains the reduction did not seem called for. Passenger trains are not very heavy; and the reduction of three or four miles an hour did not save any material wear and tear. The public beheld the railroads falling back from their high position, without an adequate cause.

Passing this performance by, the commercial community saw the railroad companies over the whole land combining to raise the price of freight. This too may have been to a certain extent reasonable, but was not calculated to gain popularity. The public do not like a step backward, and the result was a silent but not kindly acquiescence.

In point of fact, the great Railroad Corporations did take a step backward. What did they gain by it? We say, absolutely nothing. The receipts of the last current year showed not a gain, but loss. And the revival of canal trade, and the putting steam on the New York Canals, point quite significantly to what the future will produce, if the railroads do not come up to public expectations. The great difficulty has been, that New York has *two* great lines of road contending for the Western business, and both contriving all possible ways to prevent the natural increase of business on the Pennsylvania and Baltimore routes.

Now, what business had the Western and South-western Roads to meddle with that rivalry? But, in fact, they *did* play second fiddle to the New York Roads, till at last, the injury and wrong of combinations for the benefit of the Northern route only, have become too palpable to be resisted. Nature and common sense must at last prevail. We have had another Convention and the compacts are broken up. At this point of the business, let us state some of the natural relations which can not safely be ignored, and will have their weight.

1. There are, west of the Allegheny ridge, *two* distinct natural systems. These are the Lake Basin, and the Ohio Valley. New York is naturally connected with the Lake Basin, and not with the other. On the other hand,

Baltimore and Philadelphia are naturally connected with the Ohio Valley.

2. The artificial systems of improvement have corresponded with the natural. All the New York improvements and commercial connections have terminated on the Lakes. All those of Philadelphia and Baltimore have terminated in the Ohio Valley. Hence, all the ingenuity and devices of New York managers have been directed not only to secure the trade of the whole Lake Basin, but to *draw off*, if they could, *from the natural connections of the Ohio Valley*, the trade of the Valley to itself. It was natural for New York to make the attempt, but not quite wise in the managers of the Ohio Valley trade to yield it up. In this plan, New York has been aided by Providential circumstances. The Cincinnati and Cleveland Line was the first one made; giving a railroad connection with New York, and at first, all eastern travel took that direction. A sort of habit was thus created of looking to the Northern Route. The completion of the Pennsylvania Central did something to break this charm, and the completion of the Baltimore Road has done more; but, both the latter routes has remained so *imperfect*, that a fair rivalry has never yet begun. The Pittsburg route is not complete yet; and the Marietta road is not complete. Notwithstanding, they have *begun* to produce their natural effect, and the New York route is no longer considered the only one. The roads terminating in the valley cities, such as the Miami and Columbus, the Ohio and Mississippi, the Cincinnati and Pittsburg, the Central Ohio, etc., have begun a revolution, and they will be compelled, by the force of nature, to carry it on. It is nearly three hundred miles nearer to Cincinnati, than it is to New York. Why should that advantage be lost?

The real competition of routes must begin some time. Why not now?

The position we take is this: that the system of railroads belonging to the Ohio Valley should be governed *by its own laws and conditions*, and not those set up for it by a foreign and rival route. The system belonging to the Basin of the Lakes is a distinct one, and in which New York may claim a primary influence; but, that system should not govern the Ohio Valley.

Well, the compact is broken, and in less than a week we find (for the public,) a beneficial result! The Western Lines resolved to make quicker time; the result of which is to put *passengers* in New York (*via Philadelphia*), sooner than the New York lines could, by their time. Already, the New York lines have resolved to quicken their time *three hours*. Thus the public gain and the roads will not lose, for that time can be easily made. The purpose of the New York Lines now is to (leaving Cincinnati at 6 A. M.,) arrive in New York at half past one P. M. This will give 31½ hours—a trifle sooner

than the route was made three years ago. In spite of all this, the distance can be made *via* Philadelphia in less time. Thus:

Cincinnati to Pittsburg.....	9 hours.
Dinner.....	3 "
Pittsburg to Philadelphia.....	12 1/2 "
Philadelphia.....	1 "
Philadelphia to New York.....	3 1/2 "
Aggregate.....	26 1/2 "

This takes the passenger into New York at 8 1/2 A. M., and after breakfast and rest, leaves the day for business; and we hazard nothing in saying, that this will be done, if not this year, next. It gives 710 miles to be run, at 30 miles per hour, and two and a half hours for stops. That is a moderate rate, and the Pennsylvania Road is well made. So far as regards *time* between Cincinnati and New York it can be made sooner by the Pennsylvania route, than on any. But, in regard to reaching a *navigable port of the Atlantic*, with such articles as flour, pork, lard, tobacco, and corn, it can be done easier over the Baltimore route, which is shorter than either. The New York route is as much longer than the others, as the whole distance from Cleveland to Buffalo, and *that* is a difference not to be got over.

We have made these observations to show that,—that there are Natural Laws which must ultimately govern this matter, and it is not wise to controvert those laws by artificial combinations. It is not beneficial to the public, and it is not wise for the companies, for they will fail in the attempt.

BRITISH ROUTE TO THE PACIFIC.

The Government of the United States after having made the most complete and expensive surveys (very creditable to the officers who made them,) and after wrangling about routes to the Pacific, have done—*nothing*! Nor does it seem likely to do any thing. It has labored and brought forth scarcely a *mouse*. In fact, the Government acknowledge itself a failure, in regard to great national works. We are not surprised at this. Congress is composed of politicians; and to flatter the people with mere words, and display themselves, is the great object of the majority of members. This being the case, it is not surprising that even the most positive demonstration of great national benefits prove weak in comparison with political shows. We do not, however, despair of the work itself. Time will do much, and the States and Territories will carry their roads to the borders of the uninhabited regions. Then the Government will take it up, and finally we shall have a Railroad to the Pacific. But, this takes time, and will the British Government be silent and inert all this time?

Our readers *ought* to know, if they do not, that the British have a good route through their dominions, without touching our territories, and will they not use it?

Then commencing on the British side of of Lake Superior, and going near 49th paral-

lel, there is a good route. Observe also, that the climate is no more a barrier than it is on any American route, except the Texas route. We have always said, that the Texas route was the best; but, it is liable to the objection, that is on one side of the Union, and a large part of the United States would not be accommodated by it. There must be, at some time, a Northern route, and if the States does not seize upon it, the British will.

The following is a sketch of the British route as stated to the Geographical Society by the Colonial Secretary:

1, From the south branch of the Saskatchewan to Kutanie River two—*i. e.*, Kananaski Pass and Vermillion Pass; 2, from Kutanie River to Columbia two—*i. e.*, the Lake Pass and Beaver Foot Pass; 3, from the south branch of the Saskatchewan to north branch one—*i. e.*, the Little Fork Pass; and, 4, from the south branch of the Saskatchewan to the Columbia one—*i. e.*, the Kicking Horse Pass. In addition to these discovered passes, the Northern Kutanie Pass has been laid down, and found to be entirely within the British territory, and has been named British Kutanie Pass. After the reading of these highly important papers, the President, in commenting upon the reports which had been read, reminded the Fellows that the expedition was fostered in the first instance by the Geographical Society, and that they had, therefore, great reason to be proud of such successful results as those which had attended it. After briefly alluding to the praiseworthy efforts made by Palliser and his associates, Hector, Blackiston and Sullivan, in a preceding year, in defining the nature of the great region between Lake Superior and Lake Winnipeg, and thence extending to the Red River Settlement, (a region also explored by men of science sent thither by the Canadian Government,) he begged the gentlemen who might be disposed to speak to confine their attention chiefly to the last discoveries, which indicated, first, the rich quality of the soil over a vast prairie country, watered by the upper affluents of the north and south Saskatchewan River, and next the existence of passes through the Rocky Mountains within the British Territory—*i. e.*, between 49 deg. and 51 1/2 deg. north latitude, which had been for the first time examined by men of science, who had determined the geographical position, the relative altitudes of the mountains, and their mineral characters. He pointed out that it was a remarkable and satisfactory *datum* that, although in this portion of its range the chain rose to much loftier summits than in its prolongation to the south, the depression, or passes, in it were now shown to be about two thousand feet lower than those by which the Americans can travel into the central parts of California. After adverting to the great interests which necessarily attached to these discoveries in relation to the establishment of a line of intercourse between the great eastern or Atlantic water shed of British North America and the newly established colony of British Columbia, with its gold fields on *terra firma*, and the great coal deposits of Vancouver's Island on the Pacific, he hoped that persons who had long studied the subject, such as Mr. John Ball, lately of the Colonial office; Mr. Edward Ellice, who had so much knowledge of British North America and so large a stake therein: Lord Bury, who had recently returned from that country, etc., would address the meeting. Mr. Ball and Lord Bury having spoken at

some length, the President, in adjourning the meeting, stated that Sir E. B. Lytton, had not only kindly communicated the despatches which had been read, but had further acceded to the request of Capt. Palliser and Dr. Hector that they might be permitted to return to England next summer, revisiting the passes they had discovered, and exploring British Columbia on their road to the shores of the Pacific.

THE NEW YORK CANALS.

The Legislature of New York has just enacted a most important law. The bill authorizes a tax of five eighths of a mill on the dollar for the completion and enlargement of the canals of the State. We give below the gist of the law:

Sec. 1 of the bill levys the tax.

Sec. 2 appropriates the money as follows: To the enlargement of the Erie Canal, \$412,150; enlargement of the Oswego Canal, 138,610; enlargement of the Cayuga and Seneca Canal, \$66,615; completion of the Bank River Canal, \$49,780; the Genesee Valley Canal and extension 17,770; the Champlain Canal, \$60,115; Chenango Canal \$5,000.

The further sum of \$125,600, or so much thereof as may be necessary, to pay the interest which has accrued and may accrue up to the 1st of July, 1859, on drafts drawn by the Canal Commissioners for the enlargement and completion of the Canals of the State, for damages awarded by the Canal appraisers, and for awards made by the Canal Board; and to pay the interest on damages awarded by the Canal appraisers; and on awards made by the Canal Board and Board of Canal Commissioners, previous to the 1st day of January last, for which drafts may not have been heretofore given; and to pay the interest on a certain loan of \$300,000 made pursuant to the act, chapter 363 of the laws of 1857. In case the moneys arising from the taxes levied by the provisions of this act shall fall short of or exceed the aggregate amount hereby appropriated, then the said appropriation shall be made pro rata in proportion to the distribution herein provided.

Sec. 3. The money appropriated by this act, to the enlargement of the Erie, the Oswego and the Cayuga and Seneca Canals, shall be applied and paid for work done and materials furnished after the first day of March, 1859, (including any work that may have been done and not paid for between the Towanda and Black Rock Dam, since the first of December last.)

Sec. 4. The Auditor of the Canal Department shall notify the Canal Commissioners, respectively, when, and as soon as he shall have any money on hand subject to their drafts, and the amount thereof, and for what object or work it is applicable; and the Canal Commissioner shall make no more drafts on the said Auditor until the receipt of the notice aforesaid, or for a larger sum, or different object than authorized by such notice from the Auditor; but nothing in this act shall prevent the Canal Commissioners, or engineer in charge from certifying the amount due the contractor for work done and materials furnished for any award made by the Canal Appraisers for lands taken, or for damage done previous to the passage of this act.

Sec. 5. In case it shall be necessary, in order to meet the appropriations made or to be made, of the moneys to be collected upon such tax as aforesaid, for the purposes aforesaid, it shall be lawful for the Commissioners of the Canal Fund and it shall be their duty, to invest, from time to time, any surplus of the moneys of the canal sinking fund, under section one of article seven of the Constitution, not less in all than the \$600,000, in the tax to be levied during the fiscal year commencing on Oct. 1, 1859, under the first section of this act, and the money thus invested shall be applied to meet the appropriations made of the moneys to arise from such tax; and so much of the moneys as may be necessary shall, when paid into the treasury, be applied and pledged, in the first instance, to reimburse the said sinking fund for the amount invested in such tax and for interest on the same, at the rate of five per centum, from the time of the investment to the day of payment.

Sec. 6. The Canal Commissioners are authorized in their discretion, for the purpose of securing navigation of the Erie Canal across the Cayuga Marshes, to maintain the present locks and the present old line of canal but no money shall be expended therefor without consent of the Canal Board.

The Duke of Newcastle, has just completed, at an enormous expense, the sinking of a coal shaft at Shireoaks, near Workop, of the extraordinary depth of 500 yards, and has produced some valuable coal from the Barnsley and Derbyshire beds. This achievement has proved that coal of the most valuable quality exists under the magnesian limestone, and shows the inexhaustibility of our fuel beds of coal.—*Herapath's Journal*.

CONSIGNMENTS BY LAKE TO THE N. Y. CENTRAL AND N. Y. & ERIE RAILROADS.

The immense freighting business of the New York Central Railroad is not permitted to be made public in any other manner than through its annual statement for the fiscal year ending on the 30th of September. In these reports are given the number of tons hauled in each direction, a detailed statement of which may be found elsewhere, for a series of years. No report, however, of the quantity of different articles is given. For the purpose of showing, to a certain extent, the business of the Central, as well as that of the New York and Erie Road, in detail, we give the following tables showing the amount of property consigned to each, during the season of navigation in 1858:

The following shows the aggregate of a few additional articles consigned to the same road, not enumerated in the above table:

Ale, bbls.	107	Hair, bbls.	24
Apples, dried, sks.	71	Hemp, bbls.	205
Apples, dried, bbls.	108	Hogs, No.	5,011
Beeswax, bbls.	20	Hops, bbls.	21
Broom corn, bbls.	87	Horses, No.	2
Brooms, doz.	119	Iron, pkgs.	102
Candles, bxs.	149	Lead, pigs.	29
Cattle, No.	923	Nails, kegs.	125
Copper, bbls.	65	Nuts, bbls.	2
Feathers, sks.	66	Oil Cake, sks.	152
Feed, bags.	2,359	Paints, bbls.	38
Flax, bbls.	270	Paper, bbls.	390
Furs, bbls.	87	Pelts, bbls.	1,060
Glass, bxs.	375	Rags, sks.	898
Glassware, bxs.	1,142	Sheep, No.	461
Glue stock, sks.	76	Skins, bbls.	970
Grease, lbs.	400	Tow, bbls.	10
Wine, bbls. and casks.	59		

STATEMENT, showing the amount of property consigned to the New York and Erie Railroad, by Lake, during the season of 1858.

Ashes, casks.	259	Hides, No.	5,633
Bacon, lbs.	166,600	Hogs, No.	993
Beans, bu.	45	Lard, lbs.	39,600
Beef, bbls.	5,966	Lead, pigs.	200
Beeswax, bbls.	8	Leather, rolls.	411
Broom Corn, bbls.	311	Oil, bbls.	33
Cattle, No.	108,390	Pelts, bbls.	29
Cotton, bbls.	29	Pork, bbls.	529
Cheese, bxs.	1,090	Potatoes, bu.	2
Cranberries, bbls.	62	Rags, sacks.	106
Eggs, bbls.	555	Seed, bags.	1,146
Fish, bbls.	127	Skins, bbls.	133
Flour, bbls.	40,758	Tobacco, hlds.	3
Furs, bbls.	178	Tobacco, bxs.	43
Glassware, bxs.	91	Whisky, bbls.	1,590
Wool, bbls.	579	Wheat, bu.	40,758

The average value of the property by railroad from the east is estimated at \$45,000,000, and from the west, at \$20,000,000.

STATEMENT, showing the amount of Freight and Passengers over the New York Central Railroad, Way and Through, Eastward and Westward, from 1853 to 1858 inclusive, and the receipts of Revenue for same. Also, the expenses of the Freight and Passenger Traffic, and other Disbursements and Facts connected with operating the Road:

YEARS.	Amount.	TUNNAGE—PRODUCTS OF THE FOREST.		TUNNAGE—VEGETABLE FOOD.	
		Westward.	Eastward.	Westward.	Eastward.
1853.	\$11,564,033.62	Through.	Total.	Through.	Total.
1854.	11,947,131.64	Through.	Total.	Through.	Total.
1855.	14,462,742.32	Through.	Total.	Through.	Total.
1856.	14,763,897.29	Through.	Total.	Through.	Total.
1857.	14,607,510.17	Through.	Total.	Through.	Total.
1858.	14,402,634.69	Through.	Total.	Through.	Total.
YEARS.		Westward.	Eastward.	Westward.	Eastward.
1853.	18.4	Through.	Total.	Through.	Total.
1854.	18.5	Through.	Total.	Through.	Total.
1855.	18.6	Through.	Total.	Through.	Total.
1856.	18.7	Through.	Total.	Through.	Total.
1857.	18.8	Through.	Total.	Through.	Total.
1858.	18.9	Through.	Total.	Through.	Total.
YEARS.		Westward.	Eastward.	Westward.	Eastward.
1853.	18.4	Through.	Total.	Through.	Total.
1854.	18.5	Through.	Total.	Through.	Total.
1855.	18.6	Through.	Total.	Through.	Total.
1856.	18.7	Through.	Total.	Through.	Total.
1857.	18.8	Through.	Total.	Through.	Total.
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YEARS.		Westward.	Eastward.	Westward.	Eastward.
1853.	18.4	Through.	Total.	Through.	Total.
1854.	18.5	Through.	Total.	Through.	Total.
1855.	18.6	Through.	Total.	Through.	Total.
1856.	18.7	Through.	Total.	Through.	Total.
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1858.	18.9	Through.	Total.	Through.	Total.
YEARS.		Westward.	Eastward.	Westward.	Eastward.
1853.	18.4	Through.	Total.	Through.	Total.
1854.	18.5	Through.	Total.	Through.	Total.
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1858.	18.9	Through.	Total.	Through.	Total.
YEARS.		Westward.	Eastward.	Westward.	Eastward.
1853.	18.4	Through.	Total.	Through.	Total.
1854.	18.5	Through.	Total.	Through.	Total.
1855.	18.6	Through.	Total.	Through.	Total.
1856.	18.7	Through.	Total.	Through.	Total.
1857.	18.8	Through.	Total.	Through.	Total.
1858.	18.9	Through.	Total.	Through.	Total.
YEARS.		Westward.	Eastward.	Westward.	Eastward.
1853.	18.4	Through.	Total.	Through.	Total.
1854.	18.5	Through.	Total.	Through.	Total.
1855.	18.6	Through.	Total.	Through.	Total.
1856.	18.7	Through.	Total.	Through.	Total.
1857.	18.8	Through.	Total.	Through.	Total.
1858.	18.9	Through.	Total.	Through.	Total.
YEARS.		Westward.	Eastward.	Westward.	Eastward.
1853.	18.4	Through.	Total.	Through.	Total.
1854.	18.5	Through.	Total.	Through.	Total.
1855.	18.6	Through.	Total.	Through.	Total.
1856.	18.7	Through.	Total.	Through.	Total.
1857.	18.8	Through.	Total.	Through.	Total.
1858.	18.9	Through.	Total.	Through.	Total.
YEARS.		Westward.	Eastward.	Westward.	Eastward.
1853.	18.4	Through.	Total.	Through.	Total.
1854.	18.5	Through.	Total.	Through.	Total.
1855.	18.6	Through.	Total.	Through.	Total.
1856.	18.7	Through.	Total.	Through.	Total.
1857.	18.8	Through.	Total.	Through.	Total.
1858.	18.9	Through.	Total.	Through.	Total.
YEARS.		Westward.	Eastward.	Westward.	Eastward.
1853.	18.4	Through.	Total.	Through.	Total.
1854.	18.5	Through.	Total.	Through.	Total.
1855.	18.6	Through.	Total.	Through.	Total.
1856.	18.7	Through.	Total.	Through.	Total.
1857.	18.8	Through.	Total.	Through.	Total.
1858.	18.9	Through.	Total.	Through.	Total.
YEARS.		Westward.	Eastward.	Westward.	Eastward.
1853.	18.4	Through.	Total.	Through.	Total.
1854.	18.5	Through.	Total.	Through.	Total.
1855.	18.6	Through.	Total.	Through.	Total.
1856.	18.7	Through.	Total.	Through.	Total.
1857.	18.8	Through.	Total.	Through.	Total.
1858.	18.9	Through.	Total.	Through.	Total.
YEARS.		Westward.	Eastward.	Westward.	Eastward.
1853.	18.4	Through.	Total.	Through.	Total.
1854.	18.5	Through.	Total.	Through.	Total.
1855.	18.6	Through.	Total.	Through.	Total.
1856.	18.7	Through.	Total.	Through.	Total.
1857.	18.8	Through.	Total.	Through.	Total.
1858.	18.9	Through.	Total.	Through.	Total.
YEARS.		Westward.	Eastward.	Westward.	Eastward.
1853.	18.4	Through.	Total.	Through.	Total.
1854.	18.5	Through.	Total.	Through.	Total.
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1858.	18.9	Through.	Total.	Through.	Total.
YEARS.		Westward.	Eastward.	Westward.	Eastward.
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1858.	18.9	Through.	Total.	Through.	Total.
YEARS.		Westward.	Eastward.	Westward.	Eastward.
1853.	18.4	Through.	Total.	Through.	Total.
1854.	18.5	Through.	Total.	Through.	Total.
1855.	18.6	Through.	Total.	Through.	Total.
1856.	18.7	Through.	Total.	Through.	Total.
1857.	18.8	Through.	Total.	Through.	Total.
1858.	18.9	Through.	Total.	Through.	Total.
YEARS.		Westward.	Eastward.	Westward.	Eastward.
1853.	18.4	Through.	Total.	Through.	Total.
1854.	18.5	Through.	Total.	Through.	Total.
1855.	18.6	Through.	Total.	Through.	Total.
1856.	18.7	Through.	Total.	Through.	Total.
1857.	18.8	Through.	Total.	Through.	Total.
1858.	18.9	Through.	Total.	Through.	Total.
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1858.	18.9	Through.	Total.	Through.	Total.
YEARS.		Westward.	Eastward.	Westward.	Eastward.
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1854.	18.5	Through.	Total.	Through.	Total.
1855.	18.6	Through.	Total.	Through.	Total.
1856.	18.7	Through.	Total.	Through.	Total.
1857.	18.8	Through.	Total.	Through.	Total.
1858.	18.9	Through.	Total.	Through.	Total.
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1855.	18.6	Through.	Total.	Through.	Total.
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1857.	18.8	Through.	Total.	Through.	Total.
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1854.	18.5	Through.	Total.	Through.	Total.
1855.	18.6	Through.	Total.	Through.	Total.
1856.	18.7	Through.	Total.	Through.	Total.
1857.	18.8	Through.	Total.	Through.	Total.
1858.	18.9	Through.	Total.	Through.	Total.
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1858.	18.9	Through.	Total.	Through.	Total.
YEARS.		Westward.	Eastward.	Westward.	Eastward.
1853.	18.4	Through.	Total.	Through.	Total.
1854.	18.5	Through.	Total.	Through.	Total.
1855.	18.6	Through.	Total.	Through.	Total.
1856.	18.7	Through.	Total.	Through.	Total.
1857.	18.8	Through.	Total.	Through.	Total.
1858.	18.9	Through.	Total.	Through.	Total.
YEARS.		Westward.	Eastward.	Westward.	Eastward.
1853.	18.4	Through.	Total.	Through.	Total.
1854.	18.5	Through.	Total.	Through.	Total.
1855.	18.6	Through.	Total.	Through.	Total.
1856.	18.7	Through.	Total.	Through.	Total.
1857.	18.8	Through.	Total.	Through.	Total.
1858.	18.9	Through.	Total.	Through.	Total.

SHOWING THE EASTWARD AND WESTWARD THROUGH MOVEMENT OF FREIGHT IN TONS OVER THE FOUR GREAT LINES OF RAILROAD FOR FOUR YEARS.

NAMES OF ROADS.	1853.		1854.		1855.		1856.		1857.		1858.	
	Through East.	Total Tons.	Through East.	Total Tons.	Through East.	Total Tons.	Through East.	Total Tons.	Through East.	Total Tons.	Through East.	Total Tons.
New York Central.....	113,351	113,351	127,460	127,460	162,100	162,100	162,100	162,100	172,647	172,647	113,230	113,230
New York and Erie.....	42,139	42,139	171,592	171,592	88,707	88,707	76,735	76,735	105,472	105,472	77,108	77,108
Pennsylvania Central.....	.....	.....	.....	.....	145,599	145,599	60,130	60,130	94,005	94,005	64,088	64,088
Baltimore and Ohio.....	.....	.....	.....	.....	509,187	509,187	208,654	208,654	535,678	535,678	334,757	334,757
Total					828,136	828,136	347,619	347,619	828,528	828,528	688,365	688,365

STATEMENT OF THROUGH AND WAY TAKING MOVEMENT BY THE FOUR ROADS.

NAMES OF ROADS.	1853.		1854.		1855.		1856.		1857.		1858.	
	Through East.	Through West.	Through East.	Through West.	Through East.	Through West.	Through East.	Through West.	Through East.	Through West.	Through East.	Through West.
New York Central.....
New York and Erie.....
Pennsylvania Central.....
Baltimore and Ohio.....

The rapid increase in the tonnage of the four great lines of railroad is a fact of significance. The New York Central has doubled its through freight business since 1856, a circumstance which would be most encouraging to the stockholders had its profits increased in the same ratio. But in 1856 the road earned \$4,371,389 20, in carrying 253,288 tons of through freight. In 1858, carrying 312,408 tons of through freight, its earnings were only \$3,700,270 44. The way freight remaining nearly stationary in price and quantity, it is evident that most of this loss occurs in through freight. Certainly it can hardly be considered a wise policy to carry competition to such an extreme as to decrease the earnings over \$670,000, while carrying 20 per cent. more through freight.

A comparison of the above table with that of Canal Commerce will show that as the railroads have increased their tonnage, that of the canals have diminished. It does not show,

under the economical management of the Central Road last year, a profit of 93 cents was realized on every ton of freight carried; that the cost of running a freight train of average size one mile is only 88½ cts.; that the cost of moving one ton a mile is only 01.31; and the cost of moving a barrel of flour from Buffalo to Albany is \$0.42.1.

We may further assume that these cost prices are as low as can possibly be maintained for any series of years, on any railroad whatsoever, and that we have now accurate data as to the extent of the competing power of railroads. We select the New York Central for comparison, not only because it is parallel to the Canal, but because it is, beyond dispute, by a large margin, the cheapest operated road in the country. What it can not do, will not be done at all, so long as any attempt is made to do business at a profit. These figures, therefore, form a permanent basis of comparison of the relative expense of canal and railroad transportation.

Heretofore we have witnessed a competition between an imperfect canal and a perfect railroad. These conditions are soon to be equalized. The items of cost in canal transportation are numerous, but allowing liberally for all, including tolls on 200 tons down, and 75 tons up at 2 mills per 1000 lbs. per mile, and the cost of a canal trip from Buffalo to New York and return is about \$950, or taking the average tonnage of the trip, \$3 09 per ton. The cost of the trip not varying, except in the item of tolls, whether the load is large or small, it is evident that increased capacity in the boats is the essential element of cheapness. The figures employed above give to the canal an advantage in cheapness of 81 cents per ton. This advantage is, however, nearly compensated by the increased speed of the railroads. But with the introduction of steam on the canal, a new element comes into play. The length of the trip will be reduced materially, and at the same time the cost of transportation. It is already proved that a steamer can tow a barge at a loss of less than a day of time between Buffalo and New York. The steamer taking 200 and the barge 150 tons, the total 450 tons may be landed in New York at an expense of \$450, or \$1 per ton. The N. Y. Chamber of Commerce have endorsed the following estimate:

Actual cost of carriage per ton.....	\$0 48
Office and wharf expenses.....	52
Total	\$1 00
Add tolls at 2 mills per 1000 lbs.....	1 40
Total	\$2 40
Cost per ton by railroad.....	\$3 90
Advantage in favor of canal per ton...	\$1 50

These are the results which may be anticipated from the completion of the enlargement on the present plans. But, once attained, the necessity of lengthening the locks will be soon recognized and the tonnage of boats will be increased by 300 tons without increasing to any noteworthy degree the cost of the trip. These figures are startling, and indicate a coming revolution in the transportation traffic, which, while it must result disastrously to capital invested in railroads, will foster and encourage private enterprise, hold monopoly in check, equalize the cost of freights, and finally secure to the State of New York her position on the cheapest route.

Years.	Interest Account.	Dividend Account.	Per centage of Expenses in comparison with gross earnings.	Number of Miles Run by Passenger Trains.
1853.....	\$.....	\$.....
1854.....
1855.....
1856.....
1857.....
1858.....

Years.	Number of Miles Run by Freight Trains.	Cost per Freight Ton.	Cost per Passenger Ton.	Cost carrying one Ton.
1853.....
1854.....
1855.....
1856.....
1857.....
1858.....

STATEMENT SHOWING THE RECEIPTS OF WESTWARD MOVING FREIGHT AT BUFFALO, BY THE ERIE CANAL, FOR FIVE YEARS.

Years.	Cost carrying a ton of Freight from Buffalo to Albany.	Average price per Ton Received.	Cost carrying a ton of Freight from Buffalo to Albany.	Stock Account.
1853.....	\$0.40 5	\$4 82	\$0.40 5	\$3,053,600 00
1854.....
1855.....
1856.....
1857.....
1858.....

The essential facts evolved in the above tables are important, and should be fully understood by business men. They show that

however, that any party, save the western producer, has profited by this change. The canal forwarding interest is prostrated, the three southern routes have no hope of a dividend, while the inability of the Central to continue this reckless controversy is becoming daily more evident. If legislation does not intervene, the evil must eventually correct itself by the usual end of extravagant competition.—*Buffalo Com. Advertiser.*

COVINGTON & CINCINNATI BRIDGE COMPANY.

PRESIDENT'S REPORT.

In presenting the following annual report on behalf of your Board of Directors, it becomes my painful duty, first, to mention the death of your late President, our much-esteemed fellow citizen and friend, R. H. Ranson, whose energetic and valuable services were wholly devoted to the best interest of the great work in which you are engaged, and whose business qualities eminently fitted him for the station which he so faithfully filled.

At the time of your last annual meeting, our country was just recovering from one of those financial shocks which never fail to prostrate or seriously affect all works of public character. Our resources for prosecuting this work consisted chiefly in uncollected stock subscriptions, and \$90,000 in the bonds of the city of Covington. Not knowing how far these resources could be made available, and having adopted it as a settled policy of the Company to create no debt, it was, therefore, difficult to determine to what extent we could safely undertake to prosecute the work during the past season. It was, however, decided, in order to keep the expenditure within the limits of the Company's ability to pay, that the work should be confined to one side of the river at a time, to which the contractors agreed.

In consequence of the high stage of water in the river, active operations of laying masonry could not be resumed before the 1st of July, from which time the work progressed steadily through the season until stopped by cold weather, during which time there were 113,125 cubic feet of masonry built, which makes the aggregate of masonry built to date 311,950 cubic feet, the substantial and superior character of which attracts universal admiration, and to which your Board have reason to refer with great satisfaction. It is the masonry that constitutes the chief cost, and presents the most formidable difficulties to the speedy completion of this meritorious work. The towers on the Covington side are now seventy-five feet, and on the Cincinnati side forty-seven feet, above low water mark, and are now in a condition not to be affected by ice, high water, or such contingencies of the river as have heretofore embarrassed us. The work can now be prosecuted with such vigor as may be consistent with the means of the Company.

Important amendments to the charter of the Company authorized by the Legislatures of Kentucky and Ohio have been adopted by the stockholders, and now constitutes a part of its charter, which, among other things, increases its capital stock \$300,000, and authorizes subscriptions of preferred stock, for which books are now open; and we are persuaded that if the importance and intrinsic merits of this grand enterprise was rightfully understood and appreciated by those citizens of Covington and Cincinnati who are most interested in their prosperity, this meritorious work, that promises such certain and ample returns,

would not be permitted to languish a day for the want of the comparatively small amount now required to insure its speedy completion.

As a great thoroughfare, spanning the beautiful Ohio, connecting two great States and cities, its gigantic proportions and superior specimen of art will have no rival in the world, and will stand a lasting monument to the energy and enterprise of those good and patriotic citizens who have contributed to its erection, and may justly boast of its possession.

We invite your special attention to the following brief exhibit of the transactions and affairs of the Company, feeling confident it will meet your fullest approval, and also to the communication of your Engineer, John A. Roebling, Esq., and that this great and eminently useful work will meet with that generous and liberal support that has heretofore characterized you, and which it so richly merits.

H. BRUCE, President.

Exhibit of the Transactions of the Covington and Cincinnati Bridge Company, for the year ending Feb. 16, 1859.

RECEIPTS.

As per report of last year.....	\$238,466 03
Of which was City bonds, counted at par.....	90,000 00
Last year total.....	\$198,466 08
Received this year: Proceeds of 77 City bonds sold, (13 unsold at par,) stock collections, and sundry sales.....	68,832 65
Total.....	\$267,318 93

DISBURSEMENTS.

As per report of last year.....	\$192,558 65
Expended this year.....	51,895 00
Total disbursements.....	\$244,453 65
Balance of receipts.....	22,865 28
Total.....	\$267,318 93

ON HAND.

City bonds.....	\$13,000 00
Bills received and cash.....	9,865 28
Total.....	\$22,865 28

Exhibit of the Affairs of the Covington and Cincinnati Bridge Company up to Feb. 16, 1859.

ASSETS.

Construction—cost.....	\$252,615 46
Real Estate—cost.....	69,430 00
Flat-boats—cost.....	246 63
Machinery—cost.....	7,417 28
City of Covington bonds, 13 still unsold but held as collaterals.....	\$13,000 00
Discount on 77 sold, the deficiency to be made up by the city.....	98,870 58
Bills receivable, on hand, in suit, and cash.....	9,865 28
Sundry debts due on unsettled accounts.....	2,370 79
Due on stock subscriptions, subject to a reduction of the greater portion of \$25,361 97 inserted as a liability, because still unsettled.....	114,739 70
Difference of interest account, being surplus paid on deferred payments on real estate, after deducting interest on stock.....	1,387 58
	\$499,943 30

LIABILITIES.

Due on real estate having several years to run..	\$58,162 17
Due on construction account, of which the greater portion is to be applied on stock subscriptions.....	25,361 97
Due sundry creditors.....	3,119 16
Capital stock—amount subscribed.....	413,300 00
	\$499,943 30
Of the items composing the foregoing accounts there are still on hand, stone, machinery, &c., to the amount of.....	12,000 00
In addition to which the Company have existing contracts for materials and work to be paid for by the bonds of the Company at par.....	32,700 00
	\$44,700 00

ENGINEER'S REPORT.

The important work which you have intrusted to my charge as Superintending Engineer, is in danger of being temporarily stopped for the want of funds. But I am in hopes that

if the true state of the work becomes known, and its intrinsic merits are better understood, enough of preferred stock will be subscribed to insure its speedy completion.

Our operations commenced on the 1st September, 1856. Favored by the unusually low state of the river at that time, we were enabled to complete our foundation at a cost which is less than one-half ordinarily incurred in such undertakings. Had the attempt been made in a season less favorable, the cost of these foundations might have been increased \$100,000; or we might have been compelled to locate the towers further removed from low-water line, which would have increased the length of the central span, and would have involved a larger expenditure for the superstructure and anchorage. The complete success of our foundations is certainly a prominent feature in the character of our work. The total amount of masonry laid in the two towers, so far, is 311,950 cubic feet, or 12,478 perches. To complete them there remain 20,400 perches more to be laid. From the tabular statements appended to the President's report, it will be seen that there have been expended in all, to this date, the sum of \$259,000, which includes foundations, stone work, office, engineering and incidental expenses; as also materials and machinery on hand. This exhibit of expenditure will bear the closest scrutiny. There has been no sacrifice of money. The Bridge Company has received value in full. The work done and property acquired is worth all its cost, and more than its cost, considering the cheapness of the foundations. Nor can any reflections be cast upon the character and quality of the work. The masonry is, in point of strength and durability, not surpassed by any similar work, either in this country or in Europe.

The detailed estimate of the bridge, submitted in May, 1857, states its entire cost at about one million of dollars. Nothing has occurred since that would call for a modification or increase of this estimate.

If the adopted plan is faithfully carried out, the permanency and security of the work against floods, storms and fire will be established beyond a doubt. Indeed, as far as security of investment is concerned, the Covington and Cincinnati Bridge will be equal to the best real estate. Why is it, now, that with an abundance of idle capital seeking profitable investment on both sides of the river, such a meritorious enterprise should be lacking of support? It can only be explained by the general distrust that has taken such a firm grasp of the public mind against all incorporated public undertakings, good or bad. If it can be shown conclusively that the Bridge Company can make a ten per cent. dividend upon a capital of one million dollars in the very first year after the completion of the work, and that this rate of profit is bound to increase, who is there in possession of unemployed capital not willing to invest? And just as certain as this will take place, will the stock of the Bridge Company rise above its par value. The statistics of the past and present travel across the Ohio River between Covington and Cincinnati, which we have been at some pains in collecting, leave no room for doubt that the net receipts of the Bridge during the first year of its opening can not be less than \$100,000, making a moderate allowance for the annual increase of revenue that may be justly expected in consequence of the increased population of Covington and from the general increase of business, the net revenue will not fall short of \$150,000 in a very few years. These estimates are not based upon the prospective increase of trade and travel

that will legitimately and naturally grow out of the completion of the Kentucky Central Railroad. It will not be out of place here to refer to this subject, fraught with so much importance to both cities. It has been remarked on former occasions, but can not be too often repeated, that whenever this road shall have reached the Tennessee line, where it will connect with the whole system of Southern roads, extending over four thousand miles and branching off into every Southern State, more business will flow over it than is now conducted on all the other routes leading to Cincinnati. The bulk of this business will pass over the Covington and Cincinnati Bridge.

It is now proposed to raise a further subscription of \$500,000 as a preferred stock, which, together with a large subscription that is offered by various parties in materials, will insure the entire completion of the work. If we succeed in raising this amount, we can complete the whole structure in two or three years.

There are many capitalists not willing to invest in large corporations, who, if properly informed, will gladly avail themselves of an opportunity like the present to invest in a work whose character for permanency will be undoubted, and which will be easily and simply managed. The total capital being comparatively small and the revenues being received and accounted for every day, there is a moral certainty of a fixed average receipt. No embezzlements can take place or be practiced for any length of time which can not be readily discovered and corrected. In fact such an investment is equal, in value, to the most desirable and promising real estate investment, with none of the trouble attending the latter. The experience of similar successful works proves this. The Niagara Suspension Bridge costs \$400,000, and pays 15 per cent. net. Its stock is worth \$150 for \$100 paid. The old Alleghany Bridge, at Pittsburg, has been paying 15 per cent. for a great number of years, and would have paid more had the charter permitted. I am now engaged in reconstructing this work. The new stock has been sold at auction at or above par—none below par. It will command a handsome premium by the time the new work is completed. Were the facts of the Covington and Cincinnati Bridge as well understood here as are those of the old Alleghany Bridge at Pittsburg, our proposed issue of preferred stock would command a premium this day.

I can not yield to the belief that our enterprise will come to a stop for the want of support. I am still in hopes that enough of capitalists can be found in this community who will consider our preferred stock a most judicious and a permanent investment.

JOHN A. ROEBLING, *Engineer.*

THE NEW CANADIAN TARIFF.—The following table from the Toronto Globe shows the principal duties levied under the new tariff, as compared with those of previous years. It will be observed that in every case there is an increase, and in some, quite a large one, of the per centage levied:

	1855.	1856.	1857.	1858.	Gat's Tariff.
Coffee.....	8½ per cent.	8½	10	10	20
Molasses.....	16	11	11	18	30
Sugar, refined..	32	28	25	26½	40
Do. other.....	24	20	17½	21	30
Tea.....	11½	11½	11½	12½	20
Boots & Shoes..	12½	14½	20	21	25
Harness.....	12½	17	20	21	25
Cotton goods..	12½	12½	15	15	20
Iron goods.....	12½	13½	15	16	20
Silk goods.....	12½	13½	15	17	20
Woolen goods..	13½	14	15	18	20

PENNSYLVANIA LEGISLATURE AND THE RAILROADS.

Correspondence of the N. Y. Tribune.

HARRISBURG, March 23, 1859.

On the 5th inst., Mr. Chase of Susquehanna County, introduced into the House of Representatives of this State, resolutions "relative to the Tonnage tax on the Pennsylvania Railroad," which, on his motion, were referred to the Committee of Ways and Means. The bill was reported back from that Committee, without amendment, five or six days since, and was made the special order for this day. Accordingly, it came up, and, being considered in Committee of the Whole, was afterward amended on second reading, as indicated by brackets in the subjoined copy of the resolutions. The debate on them was very protracted and exciting, and at times tinged with personalities. The power and influence of the Pennsylvania Railroad Company was referred to by some of the members, as likely to have its effect in certain quarters, contrary to the right and interest of the State. The insinuation was indignantly repelled by several of the Philadelphia delegation, which, almost to a man, highly eulogized the Company, and defended its conduct in every respect. Two or three gentlemen went so far as to protest against authorizing the Attorney-General to bring suit against the Pennsylvania Railroad Company, and yet let other defaulting companies go "scot free." An amendment was offered accordingly, so as to include them, but it was voted down; and it was urged that, no longer ago than yesterday, had the gentleman from Susquehanna (Mr. Chase) moved to refer the resolution relative to the non-payment of the annual annuity of \$10,000, by the New York and Erie Railroad Company, to the Committee of Ways and Means.

This allusion brought Mr. Chase to his feet, and he said that he had moved to refer the bill in question to the Committee of Ways and Means, it having been erroneously before the Committee on Railroads. There was no proof that the New York and Erie Railroad Co. had refused to pay the annuity, which he believed was due for one year only. There might be satisfactory reasons given for the non-payment, and his object was to ascertain the grounds upon which the payment had been withheld. But, in regard to the Pennsylvania Railroad Company, the facts were very different. That corporation had, a few weeks ago, absolutely refused, through their board of Directors, to pay the \$90,000 due the Commonwealth, and required their agents to notify the officers of the Government of the fact. It was contended by some members that it would be an act of injustice toward the various railroad companies to include them in the resolution of instruction to the Attorney-General, for none of them had ever set up a right to fulfill their several contracts with the Commonwealth. Should they do so, they would be attended to in time. It was to be hoped that the resolution would pass in its present form.

Resolutions Relative to the Tonnage Tax on the Pennsylvania Railroad.

Whereas, In and by the twenty-second section of the act entitled "An Act to incorporate the Pennsylvania Railroad Company," approved the 13th of April, A. D. 1846, it is provided that all tonnage of whatsoever kind and description, except the ordinary baggage of passengers loaded or received at Harrisburg or Pittsburg, or at any intermediate point, and carried or conveyed over said railroad more than twenty miles, between the 10th day of March and the first day of December in each and every year, shall be subject to a toll or duty for the use of the Commonwealth at the rate of five mills per mile for each ton of 2,000 lbs; and whereas, In and by the first section of the act entitled "A further supplement to an act to incorporate the Pennsylvania Railroad Company," ap-

proved the 27th of March A. D. 1849, it is provided that the tax on tonnage of five mills per ton per mile from the 10th day of March to the 1st of December payable to the State Treasury under the provisions of the twenty-second section of the act to which this is a supplement, be commuted to a tax of three mills per ton per mile during the whole year, said tax to cover all freight carried over the road more than twenty miles, which said tax was made payable by the said Railroad Company on the 30th day of July and the 10th day of December each year; and whereas, There was due to the Commonwealth from the said Pennsylvania Railroad Company, on the 10th day of December last, on account of said tax and freight carried over said railroad about \$90,000, which sum the said Company has neglected and refused to pay; and whereas, The agreement on the part of said Company to pay said tonnage tax formed an essential part of the contract between the Commonwealth and the Company, therefore

Resolved, By the Senate and House of Representatives of the Commonwealth of Pennsylvania in General Assembly met, That the Attorney-General of this Commonwealth is hereby instructed to commence and prosecute in the Supreme Court of the State, the necessary suit or suits against the said Company for any amount of tonnage tax now due by said Railroad Company to the Commonwealth; and further, to ascertain whether the said Railroad Company, by its refusal aforesaid, has not forfeited its chartered privileges, and to take all necessary steps to procure a decree of forfeiture in said suit or suits so instituted.

Resolved, That the Auditor-General and State Treasurer are hereby instructed to charge said Pennsylvania Railroad Company, at the rate of five per centum per month, for any delay that may hereafter occur in the payment of the tonnage tax now over due, and at the same rate for any delay in the payment of the said tax which may hereafter become due.

The first resolution was adopted by Yeas 74, Nays 20. And the second was agreed to, as was also the preamble, without a demand for the Yeas and Nays.

The resolutions were then sent to the Senate for concurrence.

THE COTTON-GROWING CAPABILITIES OF SOUTH AFRICA.—On Monday, February 28, a meeting was held in the Town-hall, Manchester, to hear a statement from the Lord Bishop of Cape Town with respect to the commercial resources South Africa. There were about 200 gentlemen present, including deputations from the Chambers of Commerce of Bradford and Leeds. In consequence of the Mayor of Manchester having been called away to London, Mr. Malcolm Ross, Vice President of the Chamber of Commerce was appointed Chairman.

The Bishop of Cape Town said he believed that Englishmen had been planted on the Western coast of Africa, and at the Southern extremity, in order that we might diffuse Christianity throughout that land, and raise up one of the most degraded countries in the world to take rank amongst the civilized nations of the earth. In the Cape Colony there was a population of 300,000 or 400,000 persons, but the country, which was 600 miles in length and 400 in breadth, would accommodate as many millions of population as there were now hundreds of thousands. The inhabitants were chiefly engaged as a pastoral people.

In the Cape Colony there was no cotton culture carried on. He considered British Kaffraria a fertile country, and it was now being given out to farmers in small parcels with a view to people the country. Kaffraria Proper was one of the finest countries of the world, and one of the rivers by which it was intersected was finer than the Orange River. No country offered so fine a field for emigrants. Along the coast of Kaffraria Proper he had seen the cotton plant growing, and if we could succeed in civilizing the country we might have cotton grown there to a considerable extent. Natal, which was populated with about 120,000 loyal Zulus, was a cotton-growing country; but the cultivation of the sugar plant was likely to thrust out the cotton culture. In that portion of the country under King Pandar there was a large heathen population, and it was his intention to try to establish a missionary station there. The Griquas was not a cotton-growing country, but all along the banks of the Zambesi, as Dr. Livingstone had stated, the country abounded in the cotton plant. Dr. Livingstone had also found the coffee

plant, the sugar cane, and the castor oil plant there; and the resources of the country were capable of great development.

In answer to questions put to him, the bishop said the place where he had seen cotton growing abundantly, and dropping on the ground for want of gathering, was inhabited by heathen, and was beyond our dominions. The children who were now under education at Cape Town made rapid progress in their studies and were wonderfully intelligent. Dr. Livingstone spoke of flax being grown in the interior, but in the Cape Colony there was nothing of the kind known.

THE MILITARY FORCE OF EUROPE.

The *Commercial Union*, of Antwerp, has the following statistics of the military and naval forces of the different States on the European Continent. The figures are from reliable sources:

FRANCE—Army (effective force on June 1, 1858,) 672,400 men, 168 field batteries. Navy, 417 vessels of war; 300 sailing, 117 steam; 27,000 mariners.

AUSTRIA—Army, 670,477 men; of which 520,400 infantry, 70,300 cavalry, 59,292 artillery, 11,116 engineers and staff, 9,217 pontonniers. Navy, 104 vessels of war.

PRUSSIA—Army, 525,000 men; of which 410,000 of the active army and Landweher of first ban, 115,000 Landweher of second ban. Navy, 50 vessels of war, 3,500 mariners.

ENGLAND—Army, 223,000 men, including those dispersed in the colonies. Navy, 600 vessels of war; 300 sailing, 251 steam, 40 ships of the line, carrying 17,291 guns, and 69,500 sailors.

RUSSIA—Army, 1,067,600 men, including the reserve, and 226,000 irregulars. Navy, 177 vessels, 62,100 mariners and gunners.

TURKEY—Army, 178,000 men, reserve 148,000, irregulars 60,000, different contingents 110,000. Navy, 70 vessels, 38,000 mariners.

SPAIN—Army, 75,000 men, peace establishment, 500,600 war establishment. Navy, 410 vessels, 15,000 mariners.

SARDINIA—Army, 50,600 men. Navy, 40 vessels, 2,860 sailors.

TWO SICILIES—Army, 100,000 men, of which 10,000 are Swiss. Navy, 60 vessels; 12 sailing, 28 steamers, 100 cannonier (gun-boats), 5,362 sailors.

MODENA—Army, 3,800 men.

PARMA—Army, 2,802 men.

ROME—Army, 1,600 infantry, 1,315 cavalry.

TUSCANY—Army, 16,000 men.

DENMARK—Army, 60,000 men. Navy, 126 vessels of war.

SWEDEN AND NORWAY—Army of Sweden, 144,000 men; of Norway, 24,000. Navy, 349 vessels and 126 chaloupes cannoniers (gun-boats.)

PORTUGAL—Army, 35,000 men, including colonial corps. Navy, 44 vessels of war.

NETHERLANDS—Army, 58,647 men. Navy, 72 vessels, 58 gun-boats, 7,000 sailors.

BELGIUM—Army, 31,400 men, 7,322 cavalry, peace establishment; 84,000 men, 14,000 cavalry, war establishment. Navy, 1 brig of 20 guns, 1 goelette, 120 chaloupes and cannoniers.

SWITZERLAND—Army, 125,000 men, the reserve included; Landweher, 150,000 men.

GREECE—Army, 10,000 men. Navy, 25 vessels.

GERMAN STATES—Federal army, 250,000 men.

GERMAN CONFEDERATION—Army, 525,000 men; 49,550 cavalry, including the Austrian and Prussian contingents.

Total army, 4,962,066. Navy, stated and estimated, 263,222.

THE LEGAL POSITION OF RAILWAY SHAREHOLDERS TOWARDS EACH OTHER AND TO THE CORPORATION.

In the January Term of the Pennsylvania Supreme Court, held at Philadelphia, January, 1859, the case of *McCully vs. The Pittsburgh and Connellsville Railway Company*, error to the District Court of Allegheny County, was decided, the opinion of the Court being delivered by Mr. Justice Woodward. We copy from the *Pittsburgh Legal Journal*. The following points were ruled:

A subscription to the stock of a Railroad Company by A, in the name of B, though without precedent authority, is an act that is capable of ratification. And where B then gives a letter of attorney to C constituting him B's proxy to vote at a meeting of the Company on any question that might arise, and C attends, and acts accordingly—these are circumstances indicative of ratification which are proper to be submitted to the jury.

Where a Railroad Company neglects to call in payments and stock subscriptions, within six years after their date, if the delay be not satisfactorily accounted for, subscribers will be released from liability. *Pittsburgh and Connellsville R. R. Co. vs. Byers*; *Pittsburgh Legal Journal*, vol. 6, p. 232.

Each subscriber's undertaking is not only to the Company, but to the other subscribers. And when the Company let off part of the subscribers and return their money, without the consent of the others, actual or implied, they discharge those others from all liability growing out of their original subscriptions.

Where the charter of a Railroad Company requires that the building of the road shall be commenced within five years, the failure so to commence, with the bona fide purpose of carrying it on to completion, disables the Company from maintaining actions against the subscribers of the original stock.

But if a subscriber consents to the discharge of other subscribers and the delay of commencing the road as matters of corporate policy, which were not to affect his liability as a stock subscriber, he is estopped from alleging those matters in defence.

Where a subscriber so released from liability by the neglect of the Company, subsequently signed a blank letter of attorney authorizing his shares of stock to be voted at a special meeting of stockholders to be held for taking into consideration the acceptance of several supplements to the act of incorporation, and any subscription that might be tendered for stock in said road, held, that the act was not such as to stand for virtually a new subscription. Error to the District Court of Allegheny county.

This was an action in assumpsit brought by the Pittsburgh and Connellsville Railroad Company against James McCully, on a subscription by the defendant for fifty shares of the capital stock in said Company. The plaintiff declared on said subscription. The defendant pleaded non-assumpsit. Issue being joined, trial was had, and on the 8th day of February, 1858, a verdict was rendered by the jury for the sum of \$2,375.

It was shown by the subscription book of the Company, that on the 9th June, 1846, James Crossan subscribed for James McCully, for fifty shares of stock in said Company. \$125, the first instalment, was paid at the time of subscribing. McCully acknowledged having paid money towards the project. On 29th August, 1846, McCully gave a proxy to James Kelly authorizing him to vote his shares of stock at a meeting of the Company, which Kelly voted accordingly.

The further facts necessary for an understanding of the points decided in this case, are detailed in the opinion of Court.

The case was argued, at Pittsburgh, Nov. 24th, 1858, by Williams & Woods for plaintiff in error, and by Foster & Sewell, contra.

The fourth point of plaintiff in error, referred to with some particularity in the opinion of the Court, was as follows:

That it was the clear intent of the act incorporating the plaintiffs, that their Railroad should be commenced within five years with the bona fide purpose of carrying it on, and prosecuted accordingly with reasonable diligence, to the extent of their means, and that the failure so to commence within the said period, would operate as a determination of the charter, by its own limitation, and disable the plaintiffs from maintaining their act on, even though their continued existence may have been recognized by subsequent Acts of Assembly.

The opinion of the Court was delivered January 15, 1859, by

WOODWARD, J.—A subscription by Crossan, in the name of the defendant, though without precedent authority, was an act that was capable of ratification. The letter of attorney to Kelly, of 26th August, 1849, constituting him the defendant's proxy to vote at a meeting of the Company, on any question that might arise, and the attendance and action of Kelly at a Company meeting, were circumstances indicative of ratification which were proper to be submitted to the jury, and they having found against the defendant we are to regard him as a lawful subscriber to the shares of stock which stand to his credit on the books of the Company.

So far the case is free from all difficulty. But the subscription thus fixed upon the defendant was made June 9th, 1846, and was under an act of incorporation which provided that if the Company did not commence the construction of their road within the term of five years, the charter should be null and void. This Act passed the 3d of April, 1837, was renewed and extended by an Act of 18th April, 1843, on the "same terms, conditions and limitations," as were contained in the original Act.

Now, we have held at present term, in the case of this same Company against Matthew Byers, that under this charter the Company were bound, from analogy to the statute of limitations to call in payments and stock sub-

scriptions within six years after their date, or if the delay was not satisfactorily accounted for, subscribers would be at liberty after that lapse of time to consider the enterprise abandoned, and their subscriptions canceled. The presumptions of abandonment in such cases are very reasonable and necessary. Subscribers to stock are on the same footing as other simple contract debtors, and equally entitled to protection against stale claims.

But this case is not left to stand on presumptions of abandonment. We have direct and conclusive evidence of it in the testimony of Addison, Kelly and Robinson. Not only was the project abandoned, but the money of many subscribers was refunded to them and they released from all further obligations to the Company.

True a contract was made in December, 1847, under which work to the amount of a few hundred dollars was done by way of commencing the road, but this was not a bona fide effort at construction, but only an expedient to "save the charter" as it was called. And this contract was repudiated in the following month by a formal resolution of the board of directors.

The fact was that a feeling had sprung up in favor of a western instead of an eastern road, and the Company having set their face westward, abandoned necessarily all thought of holding the subscribers of 1846. No calls were made within six years, and no commencement of construction, such as the Act of Assembly contemplated, was made within five years after the Act of 1843.

Now, not to say that the charter was forfeited by such inaction, it is very clear that subscribers were released. McCully's undertaking was not to the Company but with the other subscribers. His subscription and theirs were mutual considerations for each other, and to let them off and hold him is to enforce a contract he never made. He has a right to insist that the Company shall perform its charter duties in time and manner prescribed, and that other subscriptions shall be enforced in the same manner as his own. And when the Company let off part of its subscribers and returned them their money, without the consent of the defendant actual or implied, they discharged him from all liability growing out of his original subscription. It was like a dissolution of partnership—or an alteration in the fundamental law of an unincorporated society, or the substitution of new and incongruous objects of a corporation, in all of which cases the responsibilities of an original partner or subscriber cease.

The points submitted on the part of the defendant, especially the 4th, 5th and 6th, put the case to the Court as an abandonment of the original subscription. The learned Judge refused to affirm the 4th point on the ground that the charter of incorporation could not be impeached collaterally, and relied for that on *Irvin vs. The Lumberman's Bank*, 2 W. and S. 203.

It is not only true as asserted in that case, that the legality of an existing corporation can not be inquired into collaterally, but as has been held in many cases, the inquiry, when directly made, can be instituted only by the Attorney General, or some other prosecutor who represents the public, but the defence here did not go to the plaintiffs' right of existence, but to its right to enforce the defendant's promise. In the case of the Lumberman's Bank the suit was on a promissory note, which recognized the existence of the corporation. Here it was on a promise which entered into the formation of the Company—a preliminary contract which, made upon the conditions expressed in the incorporating act, could be enforced only after substantial performance of these conditions. For the purpose of testing the defendant's liability therefor, not for the purpose of declaring the charter forfeited, it was competent to show what the Company were required by law to do, and what in point of fact they had done. This was the extent to which the proposed defence went, and we do not think it was excluded by what was ruled in the cited case. If the 4th point meant that the Court should declare the corporation defunct it was properly refused, but if it meant, as we suppose it did, that after all the Company had done and had forborne to do, it was no longer entitled to recover on the defendant's original subscription it ought to have been affirmed.

The Court fully recognized the doctrine of the other points, but submitted the case to the jury to infer the defendant's assent to the release of subscribers, suspension of the work, &c.

It is not to be questioned that acquiescence and assent would bind the defendant, or rather, would estop him from setting up the defence in question. That is to say if there was evidence that McCully consented to the discharge of other subscribers and the delay of commencing the road, as matters of corporate policy, which were not to affect his liability as a stock subscriber, he is estopped now from alleging these matters in defence. But what evidence was there to estop him?

Supplementary legislation having been obtained in 1853, which recognized the existence of the Company, and authorized it to receive subscriptions to its stock from certain cities and boroughs, the defendant and several other original subscribers set their signatures to a letter of attorney, which authorized W. Larimer, jr., to vote on their respective shares at a special meeting of stockholders, to be held for taking into consideration the acceptance of the several supplements to the act of incorporation, and any subscription that may be tendered for stock in said road.

This letter of attorney was without date, and had several clauses, one of which was filled by Gen. Larimer, who inserted his own name as the attorney in fact in pencil.

A special meeting was held on the 8th June, 1853, at which Larimer voted on fifty shares of James McCully for accepting the Allegheny county subscription and the Act of Assembly.

This was the evidence from which the jury was instructed to infer McCully's consent to be bound by his subscription of 1846, notwithstanding all that had occurred to release him.

We think it was incompetent for such a purpose. The letter of attorney was manifestly an incomplete instrument. There was no evidence that the insertion of Larimer's

name was with the knowledge or consent of McCully—or that he was aware that Larimer was acting for him.

But at most it was only an authority to accept legislation that looked exclusively to new subscriptions, and not to the validating of old ones. The Act of 1853 did not cure the consequences of past delay and the doings of 1847, nor did it affect to bind any subscriber already on the books. It touched none of these subjects. It seems rather to have been designed to enable Gen. Larimer to start the road on municipal subscriptions thereafter to be obtained. And the defendant supposing him to have given a valid and formal proxy was willing, doubtless, that Gen. Larimer should resuscitate the Company in this manner.

Standing on the books as a stockholder it was a formal asset on the part of the defendant to the new policy, but did he mean to re-subscribe himself? Is it a fair interpretation of his act that he acknowledged his subscription of 1846 as a satisfying legal obligation?

We think not. We think it would be giving extravagant effect to an equivocal and insignificant act to allow it to stand for virtually a new subscription.

The defendant's original subscription made by another hand than his own, rested, as we have seen, on an implication from a former letter of attorney to Kelly. After so much delay, more than was necessary for the statute of limitations to attach—and after such decisive acts of abandonment on the part of the Company, amounting almost to dissolution, something more should have been proved to hold the defendant than the unfinished letter of attorney to Larimer.

So vague and indefinite an acknowledgment of original indebtedness would be insufficient to take any case out of the statute of limitations. True, the statute is not pleaded here, but we have to deal with presumptions that are almost equal as a defence, and the evidence to that which alone is competent to avert the statutory bar. How much stock did the defendant acknowledge himself to be responsible for? The letter of attorney gives no answer, and no evidence in the case answers the question.

The learned Judge said the number of shares on the books, but it was merely a judicial conjecture.

The truth is, undue importance was given to this evidence by the Court. It was not merely submitted to the jury for them to infer consent from, but it was put to them as sufficient to estop the defendant from denying his liability for the whole number of shares originally subscribed for.

It ought to have been rejected altogether, or being admitted, should have been controlled so as not to deprive the defendant of the benefit of the facts on which he relied.

It may be said that it was evidence of the same nature as that on which the jury were permitted to presume the original subscription—that if the letter of attorney to Kelly was sufficient to ground a presumption of subscription, that to Larimer was competent to ground a presumption of renewal.

Not so. The two instruments were different in character and circumstances. That to Kelly was complete and could be accounted for on no other ground than that the subscription standing on the books to the credit of the defendant was his subscription, whilst that to Larimer was a defective instrument and could be referred to another motive on the part of the defendant, than an intention to revive his subscription—to wit: a desire to obtain the municipal subscriptions.

It may often be more difficult to prove an acknowledgment of an outlawed debt than to prove the execution of the instrument of indebtedness. Where both conclusions are presumptive it does not necessarily follow that circumstances which raise one presumption would justify the other.

On the whole, we think the doctrine of the defendant's points ought to have been affirmed with no other reference to the jury than that the facts therein assumed might be found.

The judgment is reversed and a *venire facias de novo* awarded.

CENSUS OF THE STATE.—The following is the last summing up of the census returns of the State:

White population of the State.....	225,007
Slaves.....	30,380
Free colored.....	18,164
Total population.....	263,551
Assessed value of taxable property.....	\$378,614,232
Of which New Orleans has.....	98,256,725
Assessed taxes thereon.....	1,394,594
In New Orleans.....	483,554
School money.....	306,468
Number of votes in the State.....	55,546
Educable children.....	76,612

According to this there are 2,033 more white than colored persons in this State, and 39,371 more free men than slaves. New Orleans owns more than one-fourth of the property, and pays more than one-third of the taxes of the State. She is, however, allotted but one-fifth of the representation.—*N. O. Delta.*

The Western, Canada, has just completed the tubular bridge over Twelve Mile creek, near St. Catharine's, the first train having passed over it last week. The span from abutment to abutment, is about 174 feet, and the weight of the wrought iron 220 tons; the cost was \$60,000.

MEETING OF FREIGHT AGENTS TO-DAY.—A meeting of representatives of the Freight Department of Western roads will be held at the Burnet House to-day.

INDIANA CENTRAL.—The Annual Report of this Company was issued yesterday. From it we learn the earnings of the year were:

Passengers.....	\$197,242 07
Freights.....	116,360 91
Mails, Express and Incidentals.....	29,136 15

	\$342,339 13
And that the disbursements were.....	207,492 96

Leaving.....\$134,846 83

The Earnings of the Little Miami and Columbus and Xenia Railroad Companies for the month of March will be about eight thousand dollars in advance of the same period last year.

"GOING INTO THE DIRECTOR LINE,"

[The following rather severe *Pome* we copy from *Herald's Journal*. Of course it can have no application to our American Railway interests. Of course not.]

"Oh happy thought! than seat at Railway Board,
What pay, what patronage, what sweets afford?"
Thus mused Bloggs, as self-supreme possessed,
He twitched his wristbands, quick drew down his vest,
And with a look such can alone assume.

Coat-tails expanding, sprung about the room:
Jocund as morn, and blithe as summer's day,
Soliloquizing something in this way:—

"What, Bloggs—John. Bloggs—have you have you been doing

These last twelve years?—share-jobbing to your ruin—

Enriching no one but a greedy broker,

Half Hebrew Jew, half something else I fear—

Fool as you are, what do you expect to get there?

Turn a new leaf man—be a Railway Director—

The pay is heavy and the work is light

Leisure by day and rest unbroke at night;

One seat is, too, the access to another;

Who knows but six your fat sides they may cover?

Boards are gregarious, for, somehow or other,

Rogue brings in rogue—they seek in one another."

A seat at one? a Bloggs's ambition fix?

The paltry thought begone? here goes for six!

And yet in one there's something to be pleased at,

What 'twould bring in, is, not—not to be sneezed at,—

And Mrs. Bloggs, bless me! it never struck me—

In summer time, how lucky—ah, how lucky!

Rail without end—perhaps a steamboat too!

Tunbridge and Hastings, rise ye to my view!

Folkstone, and Dover, and, oh, gay Boulogne,

My happy vision crowd themselves upon!

Why, this share-jobbing it to tatters flogs!

And, if my wife, why not the little Bloggs?

The little Bloggs—distant and near relations—

Friends too—aye, friends—and links of all gradations?

Thus on one Board! it makes one lick one's lips—

But, only think on, multiplied by six!

Resolved—but, hold—two parties to a bargain—

What shall I say? What say? the common jargon—

Denounce extensions—capital account;

Close it instant—all that sort of rant—

Throw in a word or two about economy—

With other companies promoting harufony—

A long connection with Railway affairs—

"Hav'n't you been jobbing in them, Bloggs, these dozen years?"

If such professions don't Shareholders move,

Why, then they are not the asses that they prove.

Each trick essayed—no specious art neglected—

Bloggs is returned—by show of hands elected;

Some grand Trunk Railway halts him to the board,

"Bloggs, who that Probyngs was so nicely floored,"

The Railway held that he so fit to guide,

Than Bloggs, than he, so duly qualified—

The rail to raise it to its proper station,

Than Bloggs, John Bloggs, with Bloggs's qualification.

His quification! how the dog he chuckles,

Shareholders ever they should be such fools!

His qualification! Oh the luminous thought!

His only one, three hundred pounds he bought!

Oh basely used, abused, debauched term,

Of every Railway wrong the fruitful germ;

Of every Railway wrong the exasperation,

Thou scum of words, vile, paltry "quification!"

As well expect the dead to heave a groan,

As work from such when Railways they get on.

Work! may the term for work's sake don't affront,

Why common sense will tell you that they won't—

Work for a stake that costs him, we declare,

No more than he gets annually for sitting there!

Men work who something, something have at stake,

Fools over nothing are said pains to take—

Since clear 'tis best we matters easy take,

Why should we labor of our leisure make?

'Twill make no difference, none at Quarter-day,

Whether we work, or not, then why not play?

Five pounds, what is it to us, more or less,

Of dividend on all we may possess?

Five pounds on one hand—and a year of leisure?

Then banish five pounds, and be present pleasure!

'Tis vain to look for, Railways they will not

Be Railways till we raise this cursed blot—

Till men sit there, who are either married, or made,

By what they do there—not there for a trade.

MONETARY AND COMMERCIAL.

During the past week there has been an increase in the receipts of currency from the country, rendering the market a little more easy in its tone; first class paper is readily taken by the regular houses at 10 @ 12. There is but little doing in the street in prime paper, and the rates are consequently lower.

Eastern Exchange has advanced to $\frac{1}{4}$ prem., and is in supply equal to the demand. The following are the buying and selling rates:

	BUYING.	SELLING.
New York Sight.....	$\frac{1}{2}$ prem.	—@ $\frac{1}{2}$ prem.
Boston.....	$\frac{1}{2}$ prem.	—@ $\frac{1}{2}$ prem.
Philadelphia.....	$\frac{1}{2}$ prem.	—@ $\frac{1}{2}$ prem.
New Orleans.....	par.	$\frac{1}{2}$ @ $\frac{1}{2}$ prem.
American Gold.....	—@ $\frac{1}{2}$ prem.	$\frac{1}{2}$ @ $\frac{1}{2}$ prem.

The New York *Courier and Enquirer* of March 29th, says:

"Some of our Railroad Companies have not yet recovered from the effects of the revulsion of 1857. Railroad management in this country has not been distinguished in many cases by financial abilities of the highest order. Many availed themselves of the too ample facilities for negotiating their bonds, and are now heavily incumbered by the accumulating interest thereon. Among the foreclosures of mortgage, we note the following:

"The Lexington and Big Sandy Railroad, Ky., is advertised to be sold for the benefit of creditors.

"The Chicago, St. Paul and Fond du Lac Railroad, under a Charter from the States of Illinois and Wisconsin, is advertised to be sold on the 2d day of June next, for the benefit of bondholders for coupons due and unpaid in August, 1857. (James Winslow, Trustee.)

"The Manitowoc and Mississippi Railroad, forty-two miles in length, having its Western terminus at Menasha, Winnebago Co., is advertised to be sold on the 28th day of April, at the Merchants' Exchange, New York. (A. C. Flagg and James Horner, Trustees.)

"The trustees of the New London, Willimantic and Palmer Railroad Company have petitioned for order of Court to foreclose the mortgage on road."

Shares in the La Crosse and Mississippi Railroad Company have declined to half and three-fourths, with no demand. Milwaukee and Mississippi are quoted to-day at five per cent.

It was announced to-day that the Milwaukee and Mississippi Railroad Company are compelled to ask further forbearance on the part of its creditors, as an issue of construction bonds amounting to \$448,000 matures on the 1st proximo, for which no provision has been made.

The Bank Statement for the past week shows but slight changes, viz:

In Loans an increase of.....	\$163,000
In Specie an increase of.....	139,000
In Circulation an increase of.....	1,300
In Deposits a decrease of.....	98,000

The capital of the Bank of Commerce has been increased to over nine millions. The proposed increase of the Bank of New York and Merchants' Bank is not yet paid up in full.

To the Editor of the *N. Y. Tribune*.

SIR: In the money article of one of the morning journals, I notice a reference to the "suits attempted" on the line of the "Junction Road," as mere annoyances to force a return to the old number of trains, and are regarded in no serious light by the management. Upon inquiry in well-informed quarters I am assured that these "attempted suits" are in fact proceedings to enforce contracts made by the Junction Railroad Company, and assumed by the C. & T. Co., and upon the faith of which stock subscriptions to the amount of between \$300,000 and \$400,000 were made. These contracts are in writing, and a portion of the records of the Cleveland and Toledo Railroad. Whether they can escape a "mandamus" to perform their contracts, or the payment of large damages, may become a more serious question than the journal in question seems to believe.

The late decline in this stock has led me to make some inquiries as to the causes. These causes have been referred to by several of the daily papers, and would seem to be of sufficient moment to induce the holders of this stock to inquire whether the property they hold has any real present or prospective value. The Company has in reality but 100 miles of working road, out of which it can hope to derive any profit, but works (a part of it only partially) 175 miles.

Its bonded debt is in round numbers.....\$3,850,000
Its loan from the C. C. and C. R. (permanent)
is equal to an incumbrance of.....1,000,000
Its floating debt by last report.....400,000

Total debt, at least.....\$5,250,000

Making an annual charge upon its revenue for interest on its funded debt, and for rent.....\$33,000
Contribution to sinking fund.....19,250
Expense of carrying floating debt, at least.....40,000

Annual charge.....\$321,250

64 Courtlandt Street, New York.
Orders for the purchase of Goods on Commission,
de from our regular business, respectfully solicited
ALBERT BRIDGES,
Of the late firm of Bridges & Bro
JOEL C. LANE

LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY, NOVEMBER 29th, 1858, Trains leave Cincinnati as follows:

9 A. M. DAY EXPRESS—Stopping at Way Stations.

4:15 P. M. ACCOMMODATION—For Xenia and Springfield, stopping at intermediate stations.

11:30 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Corwin, Xenia, and London

Connections are Made by the 9 A. M., and 11:30 P. M. Trains for

ALL THE EASTERN CITIES.

The NIGHT EXPRESS Train leaving Cincinnati at 11:30 P. M., runs daily, except SATURDAYS. The other trains run daily, except SUNDAYS.

FOR THROUGH TICKETS

And all information, apply at the Offices, Walnut Street House, bet. Sixth and Seventh; No. 1 Burnet House; south-east corner of Broadway and Front streets, and at the Eastern Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Superintendent.

Omnibus calls for passengers.

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by
March 1st-58.
Feb. 25th.

VOSE, LIVINGSTON & CO.,
9 South William St., N. Y.

1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-10th, Corby, Gossin & Co.'s make, for sale very low by
TRABER & AUBERY,
7 Public Landing

A Book for Every Business Man!

JUST PUBLISHED

—THE—

POST-OFFICE GUIDE!

For Post-Masters and Business Men.

CONTAINING

A Complete List of Post-Offices in the United States and Territories, arranged by States and Counties; A Complete List of all Distributing Post-Offices; Rates of Foreign and Domestic Letter Postage; Rates of Printed Matter, Transient and Regular; Abstract of the Laws and Regulations of the Post-Office Department, &c., &c.

COMPILED BY E. PENROSE JONES,
Late Assistant Post-Master at Cincinnati.

Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.

U. S. BLANK AGENCY, CINCINNATI POST-OFFICE, }
January, 1859.

This work has been carefully compiled and corrected by E. PENROSE JONES, Esq., late Assistant Post-Master of the Cincinnati P. O., from the Records in this Department, and other sources, and contains the most complete list of Post-Offices especially of the Western, North-Western, and South-Western States, yet published.

MAHLON H. MEDARY.

Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an active pamphlet of about 100 pages. The entire matter is kept standing in type, and as the compiler is promptly advised of all New Offices, Changes and Regulations of the Department, the information is corrected up to the last day of publication, an advantage possessed by no other work of the kind.

Observe, That this list is arranged by States and Counties, making it especially valuable to business men. No similar arrangement has been published since 1856. There are 3000 more offices in this than in any book heretofore issued. The Price is one-half that of any work of the kind now published.

Single copies sent by mail (postage prepaid) to any address, upon receiving Twenty-five Cents in Silver or Postage Stamps. Five Copies sent for \$1.00, or Twelve Copies for \$2.00.

Address,

C. S. WILLIAMS,
194 Walnut Street,
Cincinnati, Ohio.

Mar 10th.

McCALLUM, BRISTOL & CO., BRIDGE & DEPOT BUILDERS.

McCallum, Bristol & Co., are prepared to construct McCallum's PATENT INFLEXIBLE ARCH TRUSS BRIDGE, for Railroad and Highway purposes at any point in Ohio, Indiana, Illinois, Missouri, Iowa, Wisconsin and Minnesota on as favorable terms as any other bridge, and in the most approved and perfect manner. Parties designing information, will please apply to the firm at their Office 99 Third St., Cincinnati, or to McCallum, Seymour & Hawley, No. 110 Broadway, N. Y. Ag. 26.

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.
SOLE IMPORTERS.

PROSSER'S PATENT SURFACE CONDENSER for high pressure steam, with sea or other bad boiler water, gauges, 3 cutter drills, counter-sinks, tube end cutting bars, expanders, tube sealers, steel wire and whalebone brushes, pall lever wrenches, tubes—plain or enameled, screwed together for Artesian Wells, HOLLOW SLABS for various purposes, Steel for Rollers.
THOS. PROSSER & SON,
27 Jan. 28 Platt Street, New York.

LANE & BODLEY MANUFACTURERS OF WOOD WORKING MACHINERY, AND CIRCULAR SAW MILLS.

Lane & Bodley's celebrated Power Motoring Machine and all Machinery used in Rail Car Shops.
Corner John and Water Sts., CINCINNATI, O.
Jan. 5th.

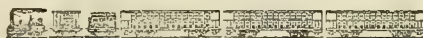
WRIGHTSON & CO., BOOK & JOB PRINTERS, NO. 167 WALNUT STREET, CINCINNATI, O.

Public attention is respectfully directed to this establishment, in the assurance that ample satisfaction will be given as regards Typography, Press Work, and Charges, to those who may require Ornamental, Common, or Book Printing. Printing from Stereotype Plates. We are better prepared to do business in this line than other house in the West.

Druggists Labels,

Are printed in the neatest manner, in Gold Silver, or Copper Bronze, on Satin, Splendid Glazed Colored Papers, or Cards, unequalled for brilliancy, at very low prices.

1858 1858. CINCINNATI AND ST. LOUIS. Through without Change of Cars, OHIO & MISSISSIPPI (BROAD GAUGE)



RAILROAD.

TWO DAILY TRAINS FOR
Louisville, Vincennes, Evansville,
Cairo, and St. Louis,
At 9:00 A. M. and 10:30 P. M.,

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M.
ACCOMMODATION TRAIN at 5:20 P. M., daily, (Sundays excepted,) for Seymour.

FOR THROUGH TICKETS

To all points West and South please apply at the Union offices, No. 2 Burnet House; south-east corner Broadway and Front street, and at the Depot, corner Front and Mill streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

MOSELEY'S TUBULAR WROUGHT IRON



ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs, are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeted always Iron.

The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges.

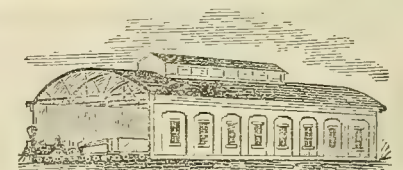
We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

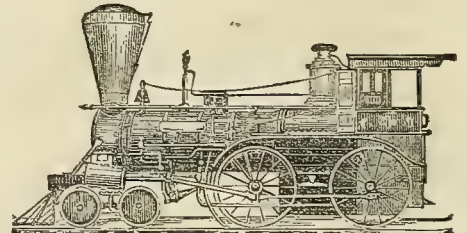
Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O.
may 13. MOSELEY & CO.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.
ap. 20 MOORE & RICHARDSON.

THE KENTUCKY MILITARY INSTITUTE,

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, but more extended in Mathematics, Mechanics, Machines, Construction, Agricultural Chemistry and Mining Geology; also in English Literature, Historical Readings, and Modern Languages, accompanied by daily and regulated exercise.

Schools of Architecture, Engineering, Commerce, Medicine, and Law, admit of selecting studies to suit time means, and object of Professional preparation, both before and after graduating.

The twelfth annual term is now open. Charges, \$102 per half-yearly session, payable in advance.

Address the Superintendent, at "Military Institute, Franklin Springs, Ky.," or the undersigned.

P. DUDLEY,

President of the Board.

Jan: 5th.

Union Works, Baltimore.**POOLE & HUNT,****Iron Founders & General Machinists,**

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap2

ANDERSON, GATES & WRIGHT,
STATIONERS, BOOKSELLERS,

—AND—

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No. 112 MAIN STREET,**East Side, between Third and Fourth Streets.**

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,

Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,
(Successors to Jacob Ernst.)
112, Main Street, Cincinnati**SCENECTADY**
Locomotive Works,
SCENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,**AND TENDERS, AND**
RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding the work to any part of the country, without delay.

JOHN ELLIS, Agent.**WALTER McQUEEN Sup't.** Aug 16, 1y

N. B.—We have two Freight Engines on hand suitable for the 4 feet 10 in. gauge. Cylinders 16 inches diameter, 22 inches stroke. Driving wheels 43 feet diam. December 18th, 1852.

D. M. CARHART,
TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builders.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address, Respectfully Yours,

D. M. CARHART,
Box 183, Cleveland, Ohio.

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T. F. RANDOLPH & BRO.,
Mathematical Instrument Makers
Removed to No. 67 West 6th St.
CINCINNATI, O.

G. G. LOBDELL. H. S. M'COMBS. D. P. BUSH.

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Wilmington - - - - - Delaware.

MANUFACTURERS OF

CHILLED WHEELS

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TIRES,**For R. R. Cars & Locomotive Engines,**

ARE PREPARED TO

Execute Promptly Orders to any Extent

FOR THEIR

CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE,

WITH OR WITHOUT AXLES.**WHEELS FITTED****To Hammered or Rolled Axles.**

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

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TUBULAR RAIL.

Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America, by STEPHENS & JENKINS, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:

The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

its density is greater.

Its welding nearer perfect, and

its durability superior.

Unlike other new forms of rail, it can be put down upon the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

Additional particulars and circulars may be had by addressing **E. W. STEPHENS,** Cincinnati, Ohio.**AMERICAN AND FOREIGN PATENT AGENT.****THOMAS D. STETSON,**
SOLICITOR OF PATENTS,
And Consulting Engineer,**No. 5 Tryon Row, (near City Hall) N. Y.****Winter Arrangement.****BALTIMORE AND OHIO****RAILROAD.****GREAT NATIONAL ROUTE.**

TERMINATES AT WASHINGTON and BALTIMORE on the East, and Wheeling, Beuwood, and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the

West, South-West and North-West.**TWO TRAINS**

Leave Wheeling daily, at 12:30 P. M., and 10:26 P. M.

Direct connections are made by these trains

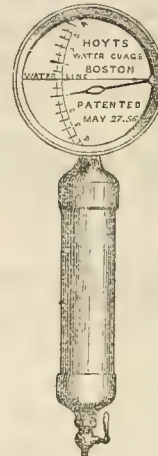
FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.

Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone, by other lines.

Time as quick and fare as low as via any other route.

Inquire for tickets via the Baltimore and Ohio Railroad, at any of the principal Railroad Offices in the West.

E. F. FULLER, Gen'l Western Agent.
L. M. COLE, General Ticket Agent.
W. P. SMITH, Master Transportation.**HOYT'S WATER GAUGE**

Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

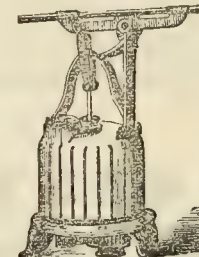
It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and it by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,
j30 No. 66 Broadway, N. Y.**GEO. D. WINCHELL & BRO.,****172 Elm Street, bet. 4th and 5th,****CINCINNATI, O.****Sole Manufacturers of McGowan's Double Action****SUCTION & FORCE PUMP**

AND

Compound Steam Pumping Engine,

WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps, as the best Pump now in use, and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings, Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855—1y**ENGINEERING!!**

The undersigned is prepared to furnish

SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c
Particular attention given to the superintending of**LOCOMOTIVES, TENDERS, CARS,****And Railway Machinery of every Description,**

While under construction.

AGENT FOR THE PURCHASE of, on commission

all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN and NOYES**METALLIC SELF ADJUSTING CONICAL PACKING,****ING, DUDGEON'S HYDRAULIC JACK,****Also, for Water Gauges, Indicators, Steam Whistler****CHAS. W. COPELAND,**

Consulting Engineer,

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CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,

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ar Broadway, New York.

The Great Arnold Secret Discovered at Last.

BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.

MANUFACTORY NO. 39 VINE ST.,
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READ THIS!

I have, at the request of Messrs. Cook, Merritt & Brown, Wholesale Stationers, 18 Beekman Street, New York, analysed two samples of FLUID INK, one marked *Arnold's Chemical Writing Fluid, P. & J. Arnold, London*. The other—BUTLER'S MERCANTILE RECORD FLUID, CINCINNATI.

I find both of these INKS to contain the same ingredients, and in the same state of combination. From the result of the various tests to which I have subjected them, I find that they are equal in *quality as well as durability*.

JAMES R. CHILTON, M. D., *Chemist*.

New York, November 9, 1859.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. **RECORD.**—For Ledgers and Records Only. **MERCANTILE.**—For Books, Letters, and General Purposes. **COPYING.**—For Letter Press only. Have had awarded them Fourteen Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

Transportation Office, Cincinnati, Hamilton and Dayton Railroad.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial.

Yours, truly,

J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio & Mississippi; Central Ohio; Baltimore & Ohio; Jackson and Vicksburg; Bellefontaine and Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena and Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B.—Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of weight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

GENERAL

RAILWAY SUPPLY AGENCY.

SNOOK & HILL'S PATENT

LOCOMOTIVE LAMPS.

83 Liberty Street, Cor. of Broadway,
NEW YORK.

JOHN W. KELLY

MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

RAILROAD ENGINES & CARS,

ALSO AGENT FOR THE SALE OF

HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,

JUDSON'S GOVERNOR VALVE.

Orders solicited and promptly filled.

Cincinnati, Hamilton and Dayton,

RAILROAD.

FOUR TRAINS
LEAVE THE SIXTH STREET DEPOT DAILY.

TRAINS RUN THROUGH TO RICHMOND, LIMA,
SANDUSKY, AND DELAWARE WITHOUT
CHANGE OF CARS.

THROUGH TICKETS
FOR
ALL EASTERN, WESTERN, NORTHERN AND
NORTH-WESTERN CITIES.

6 A. M. MAIL TRAIN, connects at Dayton with Sandusky, Dayton and Cincinnati Road, for Springfield and Sandusky—at URBANA, for Columbus—at CLYDE, for Cleveland and Buffalo, Toledo, Detroit and Chicago, arriving at Detroit at 5:30 P. M. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Munice. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

8:40 A. M. TRAIN, for Cleveland and Pittsburg, via Delaware, makes close connection at CRESTLINE, for Pittsburg, Baltimore, Philadelphia and New York; and at CLEVELAND for Dunkirk, Buffalo, Boston and New York.

4:30 P. M. TRAIN, for Springfield and Sandusky—connects at FOREST, for Chicago—at CLYDE, for Toledo—at SANDUSKY, for Cleveland and the East. Connects also at DAYTON, for Troy, Piqua, Sidney, Lima, and Chicago—at SIDNEY, for Pittsburg and the East. Also connects at RICHMOND, for Indianapolis, Terre Haute, St. Louis and Chicago.

5:40 P. M. TRAIN, for Hamilton and all way stations.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut Street, near Gibson House; No. 3 Burnet House; or at the Sixth Street Depot.

D. McLAREN, Superintendent.

GEO. H. KNIGHT & BROTHER,
Patent Attorneys,

N. E. Corner Vine & 4th.

A CARD.

I take pleasure in announcing that all difficulties between my former partners, in the firm of APPLEGATE & Co., and myself have been amicably adjusted. The business will be continued by them, at the old stand, they settling all the business connected with the firm.

I do not hesitate to recommend my friends to make their purchases of them, as I believe they will find it to their advantage to do so.

JOHN B. RYAN,
Late of the Firm of APPLEGATE & Co.,
Bookellers and Stationers.
Cincinnati, March 1st, 1859.

In referring to the above Card, we take the opportunity of saying to our friends and the public, that the business as heretofore conducted by us, will be continued at the same place and under the same name and style as formerly.

Our stock is very large and varied, having just been replenished for our spring sale. We are prepared to fill all orders, at lowest prices, with promptness and dispatch, guaranteeing satisfaction to all who may favor us with their orders.

We trust by continued exertions to merit a continuance of past favors.

JAMES APPLEGATE,
SAM'L FLICKENGER,
ARTHUR H. POUNSFORD.
Cincinnati, March 1st, 1859.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, two above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw and Mills, Shingle Machines, &c.

Office No. 15 Walnut Street Cincinnati, Ohio
LEE & LEAVITT

The Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

Thursday Morning, April 7, 1859.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$ Per Annum, in Advance.

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ADVERTISEMENTS.

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THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

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RAILROAD LEASED.—The Rochester Union says the New York and Erie Railroad Company has leased for twenty years the Canandaigua and Elmira Railroad, so called, being that section of the road extending from Canandaigua to Jefferson. The Erie Company had control before of the section from Jefferson to Elmira. This gives the New York and Erie Company an opportunity to tap the Central at Canandaigua, and to interfere in some measure with its Philadelphia and Baltimore connections by the way of Elmira. The Central has had for some time the road from Canandaigua to Niagara Falls, and the broad guage route from the Erie Road to Niagara Falls is pretty much used up.

The meeting of Freight Agents, which was announced for last Thursday at the Burnet House did not come off, so that we have no new editions of Freight Tariffs to report to-day. This undertaking may be regarded as the conclusion of Railroad Conventions for the present, at least. "Every tub upon its own bottom," is the motto just now. Combinations are at a tremendous discount. Agents are for themselves, individually, and against every body of their profession in general. The aim is to secure freight—at paying prices if possible, but to secure freight any how. Cutting is the order of the day, and as the phrase is, "Blood must flow." Very low rates of freight during the summer, may be expected.

THE PROGRESS AND RESULTS OF IMPROVED LOCOMOTION.

There are few persons who actually realize the real progress of locomotion and its effects on civilization. There are multitudes to exclaim upon the wonders of a steamboat and a railroad. They realize, that their inventions are wonders; and that they are admirable and powerful machines—a sort of type of the physical progress of mankind; but, to realize what has actually been done, and how it has affected the welfare and happiness of the human race, is seldom done. To do this, we must put ourselves back an hundred years, and see how people moved and what it cost. We happen to have a series of *Almanacs*, for the last hundred years, and in these little periodicals are many very curious facts. To illustrate the progress of locomotion, we will quote some paragraphs from past history, and make some comparisons with the present. The "New York Almanac" for 1775, contains the following advertisement.

"THE FLYING MACHINE—Still continues and sets out every Monday and Thursday morning, from Fowler Hook Ferry, opposite New York, and from the sign of the cross keys in Philadelphia, at the corner of Third and Chestnut Streets, and meet at Princeton the same night, exchange passengers and return the next day to Fowler Hook Ferry and Philadelphia, so as to perform the journey in two days."

Mr. Mercereau, the enterprising gentleman who undertook to accomplish this feat, pledged a punctual performance, and asked for the patronage of ladies and gentlemen. And, indeed, he was worthy of it; for, without his aid, these ladies and gentlemen, instead of being two days, might have been five, and not only that, but paid five times as much; for the price charged was only five dollars. This was in the year 1775, when the first gun of the Revolution was fired. The distance from New York to Philadelphia is ninety-five miles, and the distance made by the Flying Machine was only fifty miles in twenty-four hours. The machine very prudently stopped at night, for there was no turnpikes in those days, and June mud was unfathomable. Such was the state of things in 1775. It is necessary to look to some other facts, also, in order to realize the condition of affairs. The whole population of the country was less than three millions. It is now about ten times as much, so that the ratio of increase in population is about equal to that of increase in locomotive speed. The roads west, which were then mere traces or military roads, did not extend beyond Chambersburg, Pennsylvania. There was a road or trace of a road, to Pittsburg; but, no stage road. Indeed, stages did not go west of Carlisle, for many years subsequent to that period. In 1800, twenty-five years after, there was no post route west of Philadelphia; in fact, could not be, for there were no settlements, except two or three vil-

lages in Ohio and Kentucky, and they were reached by river.

In 1807, the first steamboat voyages commenced on the Hudson; but, for several years after that, all ferry-boats were moved by sails or by poles. In 1809, there were no stages west of Carlisle. The consequence was, that goods were carried (even salt) over the mountains by wagons or by pack-horses.

The first great improvements in the freight department between the east and the west was in the establishment of *Wagon Lines* from Philadelphia to Pittsburg. These old fashioned freight wagons were a curiosity. They were as high as good sized boats, covered with linen cloth, and carried from two to four tons of goods. The usual team was six horses of the Conestoga breed, large, heavy, powerful animals. They were fed largely with oats, and traveled about twenty miles a day; and allowing for stoppages, made the trip from Philadelphia to Pittsburg in about twenty days. Allowing for change of freight at Pittsburg, it was about one week on the river, to Cincinnati. The merchant could pretty safely trust on getting his goods out in about four weeks. The traveler may be said to be no better off in point of time. For there were no stage lines west of Chambersburg; and to carry a family, there was no good way, but to provide their own conveyance. A gentleman was compelled to get his own carriage and horses, and then he would be about four weeks on the way.

Thus matters rested till about 1820-'25, when stages were introduced, and the journey was made in *ten days* from New York. This was a vast improvement, and it made a great era in traveling towards the west.

Traveling by stage was, in 1830-'31, made easier, by having steamboats from New York to Baltimore, and steamboats on the Ohio, when the time of the journey was reduced to six or seven days. About 1834-'35, the Baltimore and Ohio Road was finished to Frederick. From that time on, every year increased the speed with which the journey could be made, till now we can go from Cincinnati to New York in thirty-two hours! At this point it is likely to remain for some years. The power of locomotives is now well ascertained, and it is not likely to be greatly increased. We may go to New York (from Cincinnati) in twenty-four hours safely; but more than that is not likely to be accomplished for another generation. At least it is not at all easy to conceive how we can move more rapidly, with safety.

Such is the actual progress of locomotion; but its results are, if not more wonderful, far more important, especially in movement of all kinds of produce, and merchandize.

It was of great value to the people to move rapidly and cheaply, thus facilitating social intercourse, enlarging the circle of friends, and knowledge, and the means of business;

but, this was nothing to the means of supplying the great markets with food, and increasing wealth, and advancing the value of landed property.

In the first place, we may observe, that prior to the introduction of railroads, the exportation of products from a large part of the Valley of the Ohio was impossible. It would not bear transportation even to the canals, when more than twenty miles off. But, before the introduction of canals it could not be transported to the east at all, except by way of New Orleans, alike hazardous and expensive. In fine, till within the last five or six years, a very large part of the farming land in the Valley of the Ohio was comparatively without a market.

Let us look at the difference between 1830 and 1858, in this respect. Even with the canals, the transportation of flour was \$2 00 per barrel, and of pork \$3 00. It is now \$1 00 and \$1 50. Now, let us look to the results of this on a farmer who fattens 100 hogs, and raises 500 bushels of wheat, which is equivalent to one hundred barrels of flour. The reduction of transportation goes to increase the price; for the merchant will get the same price in either event. The farmer's gain, then, gives \$100 on his flour, and \$150 on his hogs; \$250, or interest on \$4,000 of capital.

A farm of two hundred acres is sufficient to furnish this surplus; so that the progress of locomotion since 1830 has added in itself alone, \$4,000 to the value of a two hundred acre farm; or \$20 00 per acre. Looking to the increased value of property in Ohio, we have no doubt whatever, that this has been the actual fact on all improved lands, which amount to about fifteen millions of acres; so that the improved locomotion has per se, added three hundred millions of dollars to the value of lands alone.

To the merchant the result has been even more important; for, who can estimate the advantage of getting early to market? To say nothing of reduced freights, and interest on money.

The results of the new locomotion are incalculable, and if they were fairly estimated, would far outweigh the entire cost of railroads, if they paid nothing back.

IMPROVED RAIL CAR.

A car is being built and is nearly completed, at Princeton, N. J., in which the strength of the sides, end and roof, and a large proportion of the floor is obtained from iron strips, instead of timber. The car is a little larger than an ordinary sixty passenger car, and weighs so much less that the difference to haulage and in destruction of the track, will be very sensible. The body weighs only 9,000 lbs. The bodies of wooden cars weigh from 13,000 to 18,000 lbs.

The plan on which it is constructed is the invention of a Frenchman, one Dr. La Mothe, and consists in running bands of thin strips around the structure and at right angles to each other, and allowing the several strips to alternate upon each other at the crossings, where they are also riveted. It is immensely strong in proportion to its weight.

Some small cars of the new style have been in use on the New York City Railroads for several years. This is the first sixty passenger car. It will be used in Massachusetts, and has been purchased by the railroads diverging from Boston, and to run on each as an experiment.

THE COLUMBUS R. R. CONVENTION.

The Convention finally adjourned Friday, having completed a freight tariff, given below, and passed a series of resolutions which we publish:

Rates of Freight from Cincinnati to New York.					
	1st Class.	2d Class.	3d Class.	4th Class.	Fl'r.
All Rail.....	1 25	1 00	80	55	1 10
Lake and Rail.....	1 17	92	75	50	1 00
River, Rail and Ocean.....	1 17	92	75	50	1 00
Rail, Lake and Canal.....	1 09	84	70	45	90

Differences between All Rail and Rail and Water Rates.

	1st Class.	2d Class.	3d Class.	4th Class.	Fl'r.
From Cincinnati, Dayton, Springfield, Piqua, Urbana, Indianapolis, and other common ports:					
River, Rail and Ocean.....	8	8	5	5	10
Lake and Rail.....	8	8	5	5	10
River and Rail.....	8	8	5	5	6
Rail Lake and Canal.....	16	16	10	10	20
Louisville, Jeffersonville, Madison and N. Albany:					
River and Rail.....	25	15	10	8	10
Lake and Rail.....	25	15	10	10	20
River, Rail and Ocean.....	25	15	10	10	20
Rail, Lake and Canal.....	35	25	20	15	30
St. Louis, Evansville and Cairo:					
River and Rail.....	25	15	10	8	15
Lake and Rail.....	25	15	10	10	20
River, Rail and Ocean.....	25	15	10	10	15
River, Lake and Canal.....	35	25	20	15	30

RESOLUTIONS.

Resolved, That we recommend the adoption of the above rates, to take effect on the 1st of April next, and,

Resolved, also, That proportional rates, upon the foregoing basis, governed by the terms of the St. Nicholas compact, be applied to all other points, and further

Resolved, That the difference between water and rail, as specified in the foregoing schedule, be adopted as such difference permanently, whether the following or other rates be established.

Resolved, That the existing embarrassments in adjusting the rates of transportation, and the speed of running trains, now so threatening to the railroad interests of the country, imperatively demand the prompt and universal concurrence of all Western Railroad Companies in the Cleveland compact, and that all the Companies that have not yet assented to the compact, be hereby earnestly requested to do so without delay, and that the Secretary of this Convention be requested to forward a copy of these resolutions to each of said Companies.

The Illinois Central Railroad Company was organized for the year, at a meeting of the Board in New York on Saturday, by the re-election of W. H. Osborn, *President*, and G. B. McClellan, *Vice-President*.

HUNT'S MERCHANTS' MAGAZINE for April is at hand, and opens with a well written article on the acquisition of Cuba, by F. O. J. Smith, of Maine. The balance of the Magazine is occupied with the usual statistical variety ever to be found in "Hunt's."

BUFFALO.

The following interesting statistics conclude a very elaborate article on the "Trade and Commerce of Buffalo, for the year 1858." We copy from the Buffalo Commercial Advertiser:

Population of the City.....	100,000
Value of real estate.....	\$29,446,280
Value of personal property.....	6,067,720
Capital of the Banks.....	\$35,514,000
Aggregate receipts of all grain including flour reduced to wheat bu.....	2,726,700
Reported sales of flour, bbls.....	28,219,855
" " wheat, bu.....	335,000
" " corn, bu.....	5,893,000
" " oats, bu.....	3,054,000
" " grains, bu.....	1,214,000
" " ".....	183,500

Grand total of reported sales including flour reduced to wheat, bu.....	11,921,500
Number entrances and clearances of vessels into and from the port.....	8,318
Number of tons of same.....	3,329,246
Number of men employed to man same.....	86,851
Storage capacity of Elevators, bu.....	1,895,000
Elevating capacity per hour, bu.....	33,500
Tonnage of Lake vessels owned in the city.....	90,852
Value of the same.....	\$3,426,000
Shipments of all grain including flour reduced to wheat to points west of Troy and Albany, bu.....	5,066,179
Number tons property shipped by canal.....	766,496
Aggregate of tolls collected.....	719,683
Number tons of property which arrived by canal.....	218,965
Estimated value of property which arrived by railroad from the west.....	\$20,000,000
Estimated value of property by railroad from the east.....	45,000,000
Average value of property received by lake.....	41,144,065
Average value of property arrived by canal.....	33,039,905

Total value of property which came to the city.....\$139,183,970

CHICAGO, ST. PAUL AND FOND DU LAC R. R. CO.

This Company, has been enabled, by a wise arrangement among its creditors, to be renewed, and the money necessary to complete the road—\$600,000 to be raised so as to benefit all parties—including the stockholders—who are generally excluded and sacrificed in such a collapse as attended this Company.

The liabilities of the Company are.....\$9,473,180
And Stock.....4,250,000

To finish the road, there remains fifty-six miles between Janesville and La Crosse junction, one half of which is graded. North of Oshkosh only two and a half miles of track remain to complete the first section of twenty miles of the land grant road. The Company's necessities are as follows:

To complete the road.....\$600,000
To discharge mortgage debts on depots and engines.....230,000

Total.....\$830,000

The plan of relief agreed upon by both bond and stock-holders and creditors is as follows: New twenty-five years' 6 per cent. bonds to be created for \$4,500,000—of which \$3,500,000 are to be exchanged for the present first mortgage bonds and coupons, while \$1,000,000 shall be set apart to complete the road and discharge the special liens just referred to. New thirty years' 6 per cent. bonds also to be created for \$2,000,000. The first and second mortgage bondholders subscribe 10 per cent. of their claims toward the \$1,000,000 wanted for the new operations of the Company, for which they receive new bonds. The second mortgage bondholders also give up \$1,000,000 of their bonds for grants of land to be made to them. The unsecured creditors agree to take 75 per cent. of their claims in new stock, to be a full liquidation, and the stockholders 60 per cent. of their present stock in the new. —N. Y. Independent.

SOUTHERN PACIFIC RAILROAD!

An Abstract of the Remarks of Dr. Jephtha Fowlkes, delivered to the Stockholders of New Orleans, at Odd Fellows' Hall, on Tuesday night, February 16, 1859, revised and arranged by himself for official publication, as follows:

Dr. Fowlkes commenced by saying that no one regretted more deeply than he the failure of the last effort at compromise. He appreciated the disinterested labors of those who had endeavored to bring about this adjustment, and he returned them his sincere thanks. The failure, as he conceived, however, was not attributable to the old company. Everything that duty, interest and honor could suggest had been freely conceded; he had made concession after concession, and had gone to the utmost limits, to bring about a compromise. It was sufficient to say, that to have conceded to the last demand made upon him, would have been to have given up his rights, and the rights of his stockholders, and that he was not willing to do. He was prepared to sacrifice his own rights—he was willing to burn up every share of stock he had in this enterprise, if it would insure justice and good faith towards those he represented; but, while he was President, it should never be said that, through his bad management, the stockholders were placed in peril. This last proposed compromise, like the others which had preceded it, proposed to give up everything, and to place his co-stockholders in the power of their adversaries. This, with his assent, should never be done. The stockholders, if they thought proper, might agree to such terms. He stood ready to surrender his position to any one whom they might select; but, in the position in which he stood, he would not consent to this last proposed compromise, even if every stockholder in New Orleans were to call upon him in person, and ask him to do it. It was folly to insist upon it. This new company had no rights, nor title. It was composed of co-partners, each of whom was personally liable in damages to the stockholders. We were willing to stake our rights even against these men who had none; but we were unwilling to do it with our hands tied, by a compromise which would enable them to defeat us.

All these so called compromises, however well intended, presented but one alternative—a surrender or litigation. Be it so. He knew that litigation would be attended with disastrous effects. But if it should be fatal to us, it will not be the less so to our adversaries. We will lose our stock, and they will lose their debts. If it must come to a sacrifice, we are better prepared to make it than they are. We have, in the aggregate, vast interests, but they are scattered among a large number, while theirs are confined to a few individuals; and, although the new company possesses but little in the enterprise that is real and substantial, they have counted upon obtaining the full amount of their claims. Our stockholders on the contrary, many, if not the most of them have become disgusted with the controversy, and have contemplated the result of failure and possible loss, and are prepared for it. He, for one, would never surrender, and if ruin must come, through the blind fatuity of those who were disposed to agree to no terms except such as would ultimately place the members of this new company in full and undisturbed possession of property unjustly acquired, it should come alike upon all. If the

enterprise was to be lost, and the stockholders to be sacrificed, he was resolved upon one thing, that it should never inure to the benefit of these men.

Mr. Grant and his immediate friends had refused to treat with him. Without the shadow of a reasonable pretext, they had rejected every effort at conciliation. The reflection attempted to be conveyed by this treatment had but little weight with him; it did not for a moment disturb his equanimity. He felt that he looked down from a high pinnacle upon Mr. Grant and his friends. That gentleman was the representative of a company which occupied no enviable position in the public mind. It was composed of a body of creditors, whose real claims did not, as he would show, exceed \$73,000, who had obtained possession of property estimated at over two millions, by a trust deed and sale which the whole country believed, whether justly or unjustly, to be a great wrong, and which they were continuing to hold against the rights of all others. Mr. Grant had published, and Mr. Hall had reiterated before a New Orleans audience, that all this new company wanted was their debts, but when their sincerity was tested, it was found they would consent to no terms which did not promise to maintain them in the possession of this property, and to ultimately perfect their title to it. He (Dr. Fowlkes) was the representative of three thousand stockholders, who, for respectability, integrity, wealth and public spirit, were equal to any body of men in the Union. There were not eleven men out of the three thousand whose moral standing was not equal to the eleven prominent members of this new company. And whatever might be said of the officers and agents of the old company, these stockholders were at least guiltless of any wrong. The worst that could be said of them was, they were not disposed to tamely relinquish their rights and retire from the field without a struggle. That, while he occupied the position he did, and Mr. Grant and his associates the one which the public assigned them—while he came forward backed by such influences, the representative of right and justice, he could smile when he was told that they would not treat with him. He could tell that audience why it was they refused to treat with him. It was because they thought they couldn't deceive him as easily as it might be possible to deceive some others. But there was no sincerity in the declaration, that all they wanted was their debts. He had tested it fully before he left Marshall, and the evidence of their ulterior purposes was conclusive. Propositions were made them through third parties, before he left Texas, to give them \$50,000 in cash, and to secure the payment, within a reasonable time, of every cent to which they were justly entitled, and they refused to even entertain them.

[Dr. Fowlkes then proceeded to state specifically the amount and character of the funds which he carried with him to Texas. This appeared in a previous publication.]

Dr. Fowlkes said he would first present his audience with the means he possessed when at Marshall, Texas, to meet the terms of compromise, and to free this great enterprise from embarrassment, and to secure the active and energetic prosecution of the work. He deemed it proper to state the sources from which he had derived the means, and the resources which were at his command. He considered this necessary to meet the incorrect and groundless charge that he had failed, and was unable to meet the terms of the committee's award of the 15th October, 1858. The representatives and receivers from each section of the Union,

will know and be able to verify the correctness of the items in the statement here presented. It is as follows: Showing, counting the debts embraced in the list of \$327,000 as actually paid off \$33,000 and those conditionally settle with Messrs. Yerger and Anderson, \$22,900, and cash securities, composed of cash and sight checks, the aggregate sum of \$197,881. Now exclude these debts, and you have the sum of 142,781 in cash funds, exceeding the amount of the award made, absolute in amount by the award—correctly added up—being only \$138,984.

The means provided to meet, compromise and relieve S. P. R. R. Co., Jan. 15, 1859.

Debts taken up by Dr. J. Fowlkes in his loan of the \$327,000 dollar list, about.....	\$33,000
Debts of Messrs Geo. S. Yerger and W. P. Anderson, paid by sale of property, \$7,000, and balance contingently arranged with Geo. S. Yerger.....	22,900
Cash received from Louisville, loan and instalments	29,000
Cash received from New Orleans, and individual sight checks.....	21,223
Cash received from Cincinnati and Ohio, and individual sight checks.....	50,458
Cash received from St. Louis, and individual sight checks.....	6,500
Cash received from Virginia, and individual sight checks.....	8,000
Cash received from New York, and individual cash checks.....	4,800
Sundry small cash receipts and remittances from Mississippi, Alabama, Tennessee and elsewhere.....	7,000
Remittances from various persons and places direct to Marshall office, say.....	2,500
Cash received, forfeited stock sold.....	12,500
	\$197,884

SUMMARY OR ANALYSIS.

Coin, New Orleans bank notes, certificates of deposit and checks.....	94,981
Individual sight checks, etc.....	47,500
Debts arranged in the list claimed.....	55,900
Forfeited stock sold for available paper, conditioned that we obtain possession of road and litigation was terminated, as follows—purchasers undoubted and influential for the enterprise:	
In Kentucky.....	50,000
In Arkansas.....	30,000
In Tennessee, Missouri and Mississippi, payable May 15, last payment of compromise.....	100,000
Another and later sale, \$30,000, for approved New Orleans acceptances at twelve months, with 8 per cent. interest.....	39,000
Also, creditors had agreed to buy for their claims of forfeited stock, provided the compromise was carried out.....	132,000
Sum total of receipts of instalments and loan.....	\$539,881
debts arranged, stock sold for available paper, and debts agreed to be settled in stock.	
Exceeding whole outstanding liability of all kinds, so far as ascertained and claimed.....	\$39,881

Now exclude the individual sight checks of \$47,500 and we have still left, in the account of cash, consisting of coin and New Orleans bank notes and certificates of deposit \$94,981, being more than double the amount of cash demanded by the award of the committee. Yet our adversaries have so far forgotten themselves, and what is due to truth and fair dealing, as to circulate, by letters, by personal assertions, and through the press of the country, at home and abroad, the charge of default and of inability on our part to comply with our agreement. The difficulty did not exist in the want with us of pecuniary ability, but with the new company in refusing to present claims, which the committee could pass upon, and which he could pay as just and bona fide, as the chief officer of the company, out of trust fund solemnly pledged in his hands to be used to secure the rights of those who had loaned it. It was demanded improperly—without guarantees of safety to the rights of stockholders, seemingly to be appropriated to those who had no just claim to its possession, and with the evident design of buying out the company's rights with their own money. He did not then pay it over, nor would he now do it, under the same state of things, and in no act of his official relations had he ever done more to merit the confidence of those whom

he has the honor to represent. He retained the money; and he still retains most of it; and will continue to do so until he can use it according to the wishes, interest and instructions of his principals, or until the same be recalled by them or returned, as in his judgment shall be most promotive of their interests. Fear nor favor shall alter his determination. The trust fund is safe; it shall be held sacred for the purpose for which it was designed, and every pledge made by him and for him in this regard shall be honorably redeemed—the slanderous suggestions of adversaries and enemies to the contrary notwithstanding—neither their machinations nor stratagems shall transfer it from his possession to their pockets. However much he appreciates their honor and their high professions of integrity, and their abhorrence of rascality, will he consent to make them or their friends the repositories of this trust fund, lest it be overtaken by casualty.

He had offered to pay the new company in cash \$50,000—all judgments, amounting to about \$25,000—all small debts in Texas, say \$30,000 more; to buy iron, cars and locomotive for the road to Marshall, and to put hands upon the work promptly. This could not be done without cash, nor with less than the \$142,000 of cash means at his command.

Why did "the new company" not accept his proposition and expose his inability and empty professions, if he had no money? Their policy and objects are as apparent to him as their insincerity must be to all who understand the facts.

Our judgment creditors and the small debts are really due, and to *bona fide* creditors; and for solid and substantial advantages to the company; and very unlike the greater part of the claims which have been set up by the members of "the new company," for bonuses, bogus stocks, and extravagant charges, and for large profits,—if not for unjust and unreasonable demands which can not be sustained in law or in morals. He then passed on to his next great proposition, to show the deficit or defalcation of upwards of \$200,000, seemingly in this company. Facts and figures, he said, could not be mistaken. The following statement, made up from the records of the company and the official reports, and statements of E. A. Blanche, Chief Engineer, and one of our most unreasonable adversaries, establish the defalcation.

Unless you discredit this witness, there could be no escape from his conclusions,—that a defalcation, or that errors, etc., exist in the accounts, claims and demands, to a large sum, now presented to us by the members of "the new company" for settlement.

He introduced the following statement, supported by the official reports and statements made by E. A. Blanche, Chief Engineer. The facts and figures from the records of Blanche's reports, etc., are his witnesses. Let them testify. What is it they say?

Statement showing deficit or defalcation of \$200,000 and upwards:

April, 1857, when office of Company removed to New Orleans, and G. S. Yerger elected President, whole debt covered by sum of.....	\$125,000
2500 tons of iron in New Orleans.....	165,000
Freights and expenses to deliver in Texas.....	35,000
Expenditures on road since April, 1857, down to April, 1858, when sale determined on.....	179,677
Bonus paid for Brown's contract.....	40,000
Stock claims of Scott, Hall, Wigfall and others.....	34,000
Bonuses to Scott and Hall to save charter, etc.....	30,000
Salaries and expenses, about.....	80,000
	<hr/> \$688,677

Receipts by Company of means since G. S. Yerger's Presidency, April, 1857:
 Subscriptions received at N. Orleans..... \$317,000
 Installments 1st July, 1857, about..... 30,000

Installments 1st July, 1853, about.....	30,000
Discounts of paper of Messrs. Stillman, Allen & Co., by Union Bank of New Orleans.....	15,000
Loan to W. P. Anderson, Jackson, Miss., by G. S. Yerger, President.....	10,000
Other small amounts received.....	19,594

Before 1st April, am't cash received..... \$421,994
 Our present debt as claimed and ostensibly outstanding vs. Company, about..... 500,000

Total amount of cash received and outstanding debt..... \$921,994

Deficit and unaccounted for seems about..... \$233,317
 Whole debt uncovered by cash means for iron, work, bonuses, contracts, and expenses, seems about..... \$266,683

A seeming deficit or defalcation of \$233,317 exists. The records of the Company and official reports of E. A. Blanche, Chief Engineer, so declare.

SECOND STATEMENT OF E. A. BLANCHE.

The testimony from the same witness. Hear what he again testifies upon another occasion, all showing the existence of this deficit, which we treat as errors, etc., for the present, rather than as frauds:

E. A. Blanche's report to 12th of May, 1858, showing whole expenditures in Texas for construction.....	\$178,072 81
Engineering.....	19,349 53
Rents, etc.....	1,690 38
Storage and freights.....	10,943 12
General expenses.....	3,984 40
Land purchased of Lucy Miller.....	750 00
	<hr/> \$214,790 24

"The above summary exhibits the amount of disbursements ordered by me since 12th of September, 1856."—E. A. Blanche's report, dated 12th May, 1858.

Credits or payments by Company in Texas upon the above expenditures:

January, 1857, cash furnished E. A. Blanche, Chief Engineer.....	\$15,000
March, 1857, deposited to credit of E. A. Blanche, at New Orleans.....	22,155
April, 1857, E. A. Blanche's receipt for cash.....	13,043
W. R. D. Ward's draft by Geo. C. Lawrason, to construction, etc.....	71,000
Provisions, etc., sent to Texas by George C. Lawrason.....	18,000
Cash sent to Texas by Jos. M. Taylor.....	1,500
Sundry small accounts not recollected.....	
	<hr/> \$140,700

Due and unpaid to 1st April, 1858, according to this report of E. A. Blanche, Chief Engineer, dated May 12, 1858..... \$74,100
 He also says he expended in May, 1858, after the sale was determined on in New Orleans, about..... 16,262

Whole total by this statement..... \$90,362
 J. E. & J. S. Brown are charged with some \$35,000 upon books of Company. This applied to would lessen Texas debts to..... 55,362

THIRD STATEMENT OF E. A. BLANCHE.

Blanche's statement to 1st April, rendered 12th March, giving names, dates and amounts.

Due to Texas creditors, being only.....	\$64,508
This statement also includes the cash loan made under the trust deed of 19th October, 1857. Expenditures in May to day of sale, reported by E. A. Blanche, about.....	16,000
	<hr/> \$80,508

Making, according to this statement, an indebtedness of about \$80,000 to Texas only. Substantially as his official report on the 12th of May, 1858.

Let him still be heard, Maj. Blanche gives names, dates, and amounts of the indebtedness to Texas creditors to 1st April, 1858, when trust sale was determined on. He (Dr. F.) held in his hand the statement, made at special request, fixing the entire indebtedness of Texas creditors at \$64,508, and this amount covers the whole cash advances of \$7,200 by Messrs. Henderson, Taylor, Hall, and Scott under the trust deed of 19th Oct., 1857. The Pandora's box of our troubles—past, present and future! Add to this the expenditures now claimed by E. A. Blanche, Chief Engineer, for month of May, 1858, to day of sale under trust deed, and we have again the claims to amount to only about \$80,000.

And what says this engineer at the foot of this statement. He would give his own language. It is as follows, verbatim:

"The above exhibit has been prepared with much care, and can not vary much from accuracy; there may possibly be included in it amounts covered by drafts on the Treasurer of the company, which were paid last October. I have not been able to ascertain what drafts were paid, and what protested at that date."

This report and the facts gleaned from it sustain the preceding statements and his conclusions, and as S. E. & J. S. Brown received the advances of \$35,000, being superintendents of the company, and this sum was intended to go to the construction of the work, it will reduce the indebtedness to Texas to less than \$60,000. Without this credit to the Texas debts, the indebtedness will be about

\$80,000; going to argue great errors, etc., of the present demands in the claims set up by our Texas creditors, who had been clamoring to get the trust fund out of his possession.

Here is just where we apprehend errors to exist in part in these Texas claims. The official reports and accounts of Col. Ward will enable us to trace out and establish error or frauds, if any there be; or remove the doubts which hang upon our minds. It was essential to justice; the vindication of himself and associates, yet it is still strangely withheld, and, he continues, with his associates, to refuse to make any report in detail. But hear him speak for himself. After refusing our application and Mr. Post's in reply to a committee appointed at a convention of the stockholders of our company. He would not do this functionary injustice. Let him speak for himself.

OFFICE SOUTHERN PACIFIC RAILROAD CO.

Marshall, Texas, Feb. 4, 1859.

Col. W. R. D. Ward, Sub-Treasurer, etc.:

Sir:—It is held by our stockholders indispensably necessary to ascertain the real indebtedness of this company, and the precise state of accounts of each and every individual with this office; and we have been appointed by a convention of our stockholders, a committee to call upon you and to urge the necessity of your rendering a full and detailed statement of your receipts, disbursements and transactions of your office, and we therefore respectfully request that you will do so at your earliest convenience.

Very respectfully,

THOMAS H. WILEY, } Committee.
 G. LEWIS, }

OFFICE SOUTHERN PACIFIC RAILROAD CO.

Marshall, Texas, Feb. 4, 1859.

To Thos. H. Wiley and G. Lewis:

Gentlemen:—I am happy to hear that the fog end of the "sold out" concern is seeking employment, and doubtless taking comfort in ascertaining the amount of its bankruptcy. Though the process of *post mortem* examination is usually unpleasant, yet the occupation thus afforded, will render, retirement, at least, less dull, than it would otherwise be. I regret to inform you that the business of the Southern Pacific Railroad Company occupies all my time, and renders it impossible for me to lend any assistance in your profitless, but very innocent amusement. By the award the necessity of paying off your debts devolves upon our company. If, in your investigation, you should by chance stumble upon any assets, we should be glad that you would turn them over to us, in accordance with the terms of the award. If either of you own any *bona fide* stock in the sold out concern, you can again become members of the Southern Pacific Railroad Company by complying with the provisions of the resolutions adopted by our company on the second instant. I enclose you a copy.

The dating your letter at the "Office of the Southern Pacific Railroad Company," and signing yourselves "Committee," and speaking of a "Convention of Stockholders," reminds me of nothing so much as Titlebat Titmouse sucking toast water through a straw, and imagining it brandy today, and taking great comfort therein!

But to be serious. Do you suppose you can longer impose on any one by continuing to play the farce of "Southern Pacific Railroad Company," after the disrobing of you by the committee on the 29th ult.? You may still excite mirth, but the laugh will be at yourselves, and not at the play.

Very respectfully,

W. R. D. WARD,
 Treasurer Southern Pacific R. R.

With a defalcation of \$200,000 before us, with apparent errors in Col. Ward's own claims, and in the claims of most of his associates, with each claim running into the other, involving the whole in embarrassment and confusion, he asked what was to be thought or might not be said by him of this officer, if he were ill-natured or suspicious, or what might he not also say of his associates who were maintaining him in a fiduciary capacity in the new company, and sustaining his course in refusing to make a report. What confidence were the public likely to have, under such circumstances, in any of them? What probability is there that the stockholders of our company will again entrust Col. Ward or this new Company with more money, until they make a report showing what has been done with the sums previously received. This new company are not entitled to their confidence. The principal members of it had a written agreement, duly signed, if not recorded, to purchase the property for the *bona fide* stockholders, a contract which they repudiated a few days before the sale, as he was at the time informed by a letter from Mr. George S. Yerger, former President, dated the 7th day of May, 1858.

What shall be thought of the refusal of any officer of "the old company, now an officer of the new," to so render an account necessary to truth, justice, duty, and honor, to all therewith connected?

He hoped Col. Ward would yet realize the error and madness of such a refusal, and would atone for such direction, making amends by the honorable surrender of all the facts and statements; yea, of the rights and property now in his possession, belonging to our stockholders who had honored him with their confidence, and who had paid him largely for all the capital and all the services which he had ever invested or bestowed in this enterprise.

FOURTH STATEMENT OF E. A. BLANCHE.

Nor are these all the evidences of error, etc., in the Texas debt. He found from examination of the official reports of E. A. Blanche, Engineer, that the cost of construction for grading, cross-ties, etc., of the first section

of ten miles of the road by 16th February, 1859, to be only about \$6,300 per mile. That the cost of the second section of twenty-five miles west of Marshall, to grade, crossings, etc., would not cost above \$12,000 or \$13,000, yet the intermediate fifteen miles, taking the cash used seemingly for it by the company, and then the present debt as now insisted upon by the members of the new company, will swell the cost to, he thought, upwards of \$30,000 per mile, a conclusive argument added to the other facts and figures, to render almost positively certain the existence of grave errors in the claims set up by the new company against the old.

If the debts be really due, let us pay them; if not, he felt sure "after the hue and cry" by these parties of "bogus stock," and the wholesale denunciations of "Wall Street," and the imputations upon "Virginia dignity," and "Kentucky honor," that our opponents would at least vindicate themselves by a full expose of accounts, and by a full surrender "to Cæsar what belongs to Cæsar." He would pardon all their spleen; forget the past for present and future justice to our stockholders. Though smitten on one cheek, he would turn to them an open bosom for every dart, if they themselves would reform errors by taking the stool of repentance. Who are they? What relations have they borne to those he represented? he asked. They have been, as he then was, the trusted officers and agents of our stockholders.

He then proposed to consider the accounts of the prominent members of the company, which seemed to be full of errors, and to explain possibly the seeming defalcation in part or in whole. He proposed this in no ill mood, but as a matter of duty.

In June, 1857, an apprehension was felt by the directors of the company that the contracts made in Texas for the completion of twenty miles of road by 16th February, 1858, essential to secure the rights of the company, were of a too uncertain character, and that a pecuniary loss should be incurred to render certain what was deemed somewhat insecure.

Under this state of facts, a contract was made with J. T. Grant & Co., at very extravagant prices, to insure the completion of the work essential to the company's rights. They assumed the contracts existing by company, with others, for clearing, grubbing, grading and track-laying. The culverts, cross-ties, &c., did not fall in their contract. All contracts made by company were assumed by these contractors for the work, &c., stipulated by them in their contract. If performed by these respective parties, they were to be assumed and paid for by J. T. Grant & Co.: if not so performed, then they assumed the responsibility of having the contracts of all such parties executed themselves. This is the substantial basis of J. T. Grant & Co.'s contract prices as follows:

Clearing and grubbing, per mile.....	\$800 90
Grading, per cubic yard.....	30
Track-laying, per mile.....	1,000 00

The grading, much or most of it, was let out at 20 and 22 cents per cubic yard; track-laying at \$500 per mile to S. H. & A. M. Burnham.

It will be remembered that Messrs. J. T. Grant & Co executed all or most of their contract, so far as charged, with Texas labor, and under the contracts made previous to the beginning of work by them under the contract of June, 1857.

The whole quantity of embankment and excavation done under this contract was, so the Chief Engineer states, 75,865 cubic yards.

They have credit for it (see their account) ...	\$22,758 50
All the clearing and grubbing (see account).....	4,000 00
All track-laying, 20½ miles.....	20,500 00

To this we make no objection, provided the work charged has been really performed, as the terms of their contract entitle them to receive the prices charged; nor do we here dis-

pute the fact that the quantities charged have been done; yet the many seeming errors at the Marshall office suggests to us the propriety of examining this point in their account as all others.

It may be proper to note the fact that these contractors abandoned the work on a default of payment according to the terms of their contract, and that, in December, 1857, the company, unable to proceed with that contract, entered into a contract with Col. Scott & Hall, to save the charter, paying them a bonus of \$20,000 for this undertaking. How far, in justice and right, this may qualify the claim of Messrs. J. T. Grant & Co., as above made, for the whole sum claimed, I do not here propose to consider or discuss.

Without a full and detailed statement, by the Chief Engineer, E. A. Blanche, and Col. W. R. D. Ward, Sub-Treasurer, showing all the accounts at the Marshall office for work, materials, and the receipts and disbursements of the moneys charged to that office, and to these parties and others, the basis of the numerous drafts drawn by them and others upon the New Orleans office and the New York office; it is utterly impossible to ascertain our real indebtedness, and to detect error or fraud upon our treasury!

To establish this proposition, he submitted the account of Messrs. J. T. Grant & Co. first. It is the basis to begin our edifice. They were chief contractors. By them we are charged with all track-laying, all grading, all clearing and grubbing. See the following account, which embraces every yard of grading done all the clearing, &c., and the whole track-laying, as per terms of contracts in June, 1857.

J. T. Grant's claim against Southern Pacific Railroad Co., from August 1st, 1857, to Feb. 12th 1858:	
75,865 cubic yards excavation and embankment, at 30 cents.....	\$22,758 50
300 cubic yards hard pan excavation, at 60c.....	180 00
5 miles clearing and grubbing, at \$800.....	4,000 00
40½ miles main track and siding, at \$1,000.....	20,500 00
Paid McReynolds on cross-ties.....	364 00
	\$47,802 50

Received from Railroad Company's provisions, &c., furnished sub-contractors, and sundry sales in amount.....	\$3,523 64
Notes due April 26.....	265 50
Notes due May 4.....	217 00
Notes due June 2.....	404 75
Interest on above.....	120 70
	\$4,531 59

Total interest to July, 1858.....	\$43,270 91
	\$45,515 64

Items in above accounts as follows:

Excavation and measurements as per Major Blanche's statement, as chief engineer, total, exclusive of payments to McReynolds.....	47,439 59
Advanced to McReynolds, on account of cross-ties, and deducted from his account.....	363 00
Interest on above, computed by the undersigned.....	2,244 73
	\$50,047 23

Credits, as above, for provisions.....	4,531 59
Due June 1, 1858.....	\$45,515 64
Interest on \$45,514 64, from June 1st, 1858, to Jan. 15th, 1859, 7½ months, at 8 per cent.....	2,275 78
	\$47,791 42

To this account we now make no objections. Assume it correct. We follow it with the account of Messrs. S. H. & A. M. Burnham, who had contracted for track-laying before June, 1857, whose contract was assumed by J. T. Grant & Co. They had agreed to lay track for about \$500 per mile. They performed the work; we are charged by them, and also by J. T. Grant & Co. This possibly may be right, but to him it looked wrong. What say our hearers? Look upon Grant's account and examine that of Burnham's. Both charge for track-laying. Burnham has grown rich by his work, at half price; and J. T. Grant & Co.,

by their bogus profits, have taken the road of their employers, and claims the honors of his (Dr. F.'s) office of Presidency—a tremendous elevation from the business of "wooden nutmegs" to the possession of "the enterprise of the age." Wondrous elevation! How he looks down upon our silly pretensions! He recommended him to read the fable of the frog and the ox. But to figures. See Burnham's account. Here it is. He thought J. T. Grant, President, would see the error of double charge, for track-laying, and correct it. It is evidently an error.

[We omit S. H. & A. M. Burnham's account for want of space.]

Again, look to settlement made on 29th April, 1858, with same parties, and you find a charge to old company by S. H. & A. M. Burnham for "grading," of \$19,33, and paid by us, also chargeable to your charge of \$22,759 for grading! The error is manifest, Mr. President. It is verily so! The original accounts show double charge against old company for same items of work!

He then presented the account of Col. W. T. Scott, late a director in "old company," now Vice President of the "new company." Col. Scott has substance and the confidence of many persons. He has his enemies, and some curse him as bitterly as he does your President—who feels proud of ability to provoke opposition and to smile at contraversion when he has the upholder of the universe to second his efforts. Right is power; error weakness. God is for the one, and against the other! Failure with us, with such odds, impossible. But to figures—Scott's account.

Statement of W. T. Scott's claim against Southern Pacific Railroad Company.

[We omit W. T. Scott's account.]

For the item for \$3,093, in Scott's account, he found \$638 charged for grading, and at \$2 per day, which he submits as chargeable to J. T. Grant & Co., and also other objectionable items.

Col. Scott's account reached, before it got out of the committee's hands, the sum of \$32,379. He could not say how—probably it was all correct.

Now, it will be seen that this account is mostly made up of claims, drafts, &c., of E. A. Blanche, Chief Engineer, and W. R. D. Ward, that may be correct or not. The report and accounts of these officers in detail is indispensable necessary.

J. T. Grant, the giant President, presented him a list of debts covering the \$327,000 spoken of in former publications by him, in which he, in October, 1858, made the claim of Col. W. T. Scott amount to \$22,625. In January, 1859, it had increased to *only* \$32,388. This may be possibly explained. He simply did not understand it.

Now he insisted that Col. Scott, late Director of old company, and Vice President of the new company, in justice to his own social position, should have the statement of our late Engineer and that of our Treasurer, made for the vindication of himself and associates, being co-partners in the so called new company, and for the ends of justice. All the claims by Col. Scott may be substantially just, or they may be fictitious or erroneous. If just, let us know, and we can pay; if not he was very sure Col. Scott ought not to desire to oppress a company struggling for life. All of these drafts, &c., may be for work, &c., falling under J. T. Grant & Co.'s contract, or none may be. All we want is light. Full investigation may vindicate all, or it will fix guilt upon the guilty—relieving the innocent—separating the tares from the wheat.

He found little in the account of Mr. Hall which he could object to, but much of it was for items which depended upon the accounts, &c., of Blanche and Sub-Treasurer Ward. It was possible, all was correct, but items might be otherwise. Without our books, &c., of Marshall office, no test could be applied to this account, as to Grant's, Scott's, Burnham's and others, which are in the list laid before the committee for our payment and their sanction.

Dr. Fowlkes said that of the indebtedness claimed by Mr. Hall, a large proportion was for bonuses and profits, and not for actual outlays for money invested. This statement was denied by Mr. Hall. Dr. Fowlkes insisted that he was right, and he thought he probably had made a more careful investigation of this point than perhaps Mr. H. had done; stating that the amount invested did not exceed \$7,000. The balance of his \$24,249 claim was for profits, bonuses and interests, &c. Mr. H. persisted, and Dr. F. produced the account, showing all told, (for figures do not often err,) that of his whole account, less bonus, &c., it fell short of \$8,000, and most of this was for claims which he had bought at 25 to 33 per ct. discount, of necessitous holders of claims against our company.

Dr. F. asked Mr. Hall to explain how he, with L. P. Grant, Prest, E. A. Blanche, Benj. Long, had rendered him, in October, 1858, a statement fixing his claims at \$17,341; and in January, 1859, it had reached the sum of \$24,249. To this, Mr. Hall replied, after October, 1858, he had bought or obtained other claims against the company. Dr. Fowlkes said this is intelligible, and he could understand the solution given by Mr. Hall. Dr. F. then stated that explanation had been so simple and satisfactory—and as he felt indisposed to do Mr. H. or others injustice—he would ask Mr. H. to explain an item in that connection. He enquired of Mr. Hall how it came that he and President Grant, had fixed the debt in October, 1858, \$18,341, as his whole debt, and yet, in January, 1859, he had produced stock issues in the new company dated in June, 1858, four months prior to the October statement of a debt only of \$18,341, for \$22,000 or 23,000! This was difficult of explanation, and Mr. Hall left the hall soon after.

M. J. Hall's claims against Southern Pacific Railroad Company.

[We omit M. J. Hall's account.]

Dr. Joseph Taylor's account arose from October, 1858, to January, 1859, from \$7,636, to \$9,545, some \$5,500 of this amount for stock, bonus, interest, &c. Col. Ward's account is essential to understand its details, &c. Dr. F. felt it due to all, that these matters be fully explained. Drafts, &c., may be traceable to the account of J. T. Grant & Co. As all may be possibly correct, the business and character of the Marshall office demands a full expose and a clean breast. Wall Street may retort upon Texas, if this be not done.

Joseph Taylor's claim against Southern Pacific Railroad.

[We omit Dr. Jos. Taylor's account.]

Next, not least, comes before us, Col. Ward.

MARSHALL, Harrison Co., TEXAS.

Southern Pacific Railroad Company in account with W. C. D. Ward.

Now, Col., could you expect the committee to allow the old company to pay your account without your official statement, showing what you had done with proceeds of \$71,000, drawn for upon New Orleans office, and \$50,000 in cash, received through E. A. Blanche, Chief Engineer? Surely not. No, sir, said Dr. F. "Tittlebat Titmouse, sucking brandy toddy thro' a quill," instead of a "water toast," could

not expect us to do so. To dispose of a trust fund, said he, acquired with so much effort and held with such repeated pledges, he could not thus dispose of, and the more especially as he had no assurance of ending the law suit, obtaining possession of road, or even being respected by Texas enemies, or thanked by the beneficiaries of such weakness and such folly had he paid it out!

W. P. Hill's claim of \$9,583 is without the shadow of a pretext of justice. He would pass it over now. Yet the new company had recognized \$4,200 of it, and our committee, in the face of proof thought it to be paid out of a solemnly pledged fund by him!

Col. Wigfall is not in any way mixed up in the charges he (Dr. F.) is now making with the accounts of W. R. D. Ward office!

Associated as he is with "new company," Dr. F. could but express his astonishment that he, Grant, Scott, Hall, Taylor, S. H. & A. M. Burnham could for a moment tolerate the course of conduct of Col. Ward, in refusing a full exhibit of the receipts, disbursements and transactions of Marshall. His act must be held the act of new company, approved and sanctioned by each of its members, especially all whose claims, &c., are tainted with doubt or suspicion of error; and by each and all who have been, and can possibly be affected by the real or possible deficit or defalcation of \$200,000 of the funds, &c., of the company. If there be an error, let it be shown; if abstracted or taken wings and flown away, let it be followed. Dr. F. had imputed guilt to no one, but he boldly charged from reports, statements and circumstances, this seeming default, and he called for investigation. Apply the torch-light of truth, for "murder will out."

The claims considered by Committee of Arbitration as claimed by new company:

	Amounts claimed.	Am't profit, bonus, &c.	Amount capital.
J. T. Grant & Co.....	\$47,791	\$22,791	\$25,000
Col. W. T. Scott.....	34,379	22,378	10,000
M. J. Hall.....	24,142	16,776	7,356
J. E. & J. S. Brown.....	44,062	43,062	nothing.
Dr. Jos. Taylor.....	9,545	5,545	4,000
Col. L. T. Wigfall.....	9,807	9,807	nothing.
Gen. E. Greer.....	193	.....	193
W. P. Hill, of this company, owes nothing.....	9,583	6,583	nothing.
F. Gardiner.....	3,237	3,237	nothing.
S. H. & A. M. Burnham.....	11,386	11,386	very little.
H. Wickland.....	12,842	22,842	very little.
E. A. Blanche, Engineer.....	4,132	4,132	nothing.
W. R. D. Ward Sub-Treasurer.....	11,548	11,548	very little.
J. P. Henderson.....	12,195	9,406	4,000
J. M. Saunders.....	504	nothing	504
R. E. Rhodes.....	2,492	2,492	nothing.
G. C. Lawrason.....	14,000	.....	16,000
H. A. Whiting, I know nothing and hold cash.....	1,365	.....	1,365
L. Richardson, do.....	404	.....	404
Jno. P. Glidden, do.....	187	.....	128
Jno. W. Goodspeed, do.....	283	.....	283
McLeroy and Bradford do.....	765	.....	765
Ed. Blood, do.....	322	.....	322
Peter Scott, do.....	241	.....	241
Geo. Smith, do.....	116	.....	116
Dr. T. Carter, do.....	196	.....	196
W. M. Watkins, do.....	471	.....	471
Martin Milligan, do.....	149	.....	149
R. C. Slaughter, do.....	1,529	.....	1,526
	\$359,623	\$185,305	\$73,318

For the information of the public, and the convenience of the parties themselves and our stockholders, Dr. F. said he had prepared the above statement, analyzing the character and solidity of these debts, and the real grounds of the complaints made by other members of the new company of their losses, hardships and burdens, from the failure of the old company to pay them their demands. It is not pretended to be accurate and precisely correct, but it is substantially so—from which it may be seen at a glance, the reality which each has in it; and the profits, bonuses, (yea, *boguses*, if you will, held in the new company by men who have "yelled" over bogus stock until some

stockholders have almost been ready to deny their connection with the company by the honest acquisition of their stock in it.

All told, the real investigation of the debts of the "new company" does not probably exceed \$73,000; while profits, &c., amount to \$185,000. Yet this just and generous company, are content to take some \$2,000,000 of property, with millions of rights—but they revile bitterly the efforts he and others have made to prevent this wrong upon their rights; they have heaped slanderous imputation upon him, and he regretted to know that, even in this city, they had abettors—inducing a few to tolerate the wrong and co-operate with them for a part of their ill-gotten treasure!

Can it be that the members of the new company really desire to get more than these profits and bonuses? \$185,000 is a good return from \$73,000, and much of this in mere labor and at high rates!

CLAMOROUS OF NEW COMPANY.

No.		Profits.	Capital.
1.	J. T. Grant & Co.....	\$22,791	\$25,000
2.	Col. W. T. Scott.....	22,379	10,000
3.	M. J. Hall.....	24,142	356
4.	Dr. Jos. Taylor.....	9,545	4,000
5.	Col. L. T. Wigfall.....	9,807	Nothing.
6.	Gen. Greer.....	.....	192
7.	W. P. Hill.....	4,200	Nothing
8.	E. Blanche.....	4,152	Nothing.
9.	W. R. D. Ward.....	11,548	Nothing.
10.	J. M. Saunders.....	.....	504
11.	Geo. C. Lawrason paid nothing, but assumed responsibility to Union Bank, New Orleans.....	.....	16,000
	Interest, profits, bonuses, &c.....	\$107,534	\$63,053
	Real investments, about.....	63,053	.....

Whole claims, profits, and investments..... 170,587

This stock in old company is a mere trifle—less I believe, than \$15,000.

We find only eleven individuals, who are really giving us trouble—they are as above—and the whole amount they have in this, in reality, is less than \$50,000; for Mr. Lawrason has not paid a cent to the Union Bank, having gone security only for the debt to be able to become interested in this great wrong upon the rights of those whom it was his duty to protect.

In this list of eleven, Messrs. Scott, Hall, Taylor, Hill, Wigfall, Blanche, Ward, Lawrason, and Grant, being nine out of eleven who seek to take property of their principals for a trifle, and under relationships which are to his (Dr. F.'s) views indefensible, and which no human ingenuity can justify!

They can not succeed with the enterprise, were it possible (which it is not) for them to succeed over our efforts to rescue the company, for the reason that the new company is held the offspring of fraud, whether the fact be so or not.

With 3,000 stockholders embittered against them, and with the most liberal allowance for them which can be made, we may safely say that in no portion of the Union does he know of eleven stockholders of the 3,000 which are not their equals in personal influence and resources. This opposition, with the sentence already passed upon their company, sealed, in his judgment, its downfall and its doom! The "new company" is a fiction; it has no legal existence as a company, and has acquired no rights. It will be permitted to acquire none. This is a fixed fact. Every stockholder is personally liable for all contracts, debts, &c., contracted with damages to our stockholders, and no prudent man or capitalist will hold a share of stock in a company which perils his estate and his fortune. Defeat is inevitably sure; a graceful retreat the only policy now left these eleven individuals, and to repair by future effort and co-operation with our stock-

holders for the success of this road. There is, in it, enough of employment and profit for the common labors, talents and capital of both them and ourselves.

The cry of bogus stock had been raised for effect, by a body of men, two-thirds of whose claims were composed of bonuses, extravagant salaries and extravagant prices for labor, and who, when their debts were paid had not a dollar's interest in the road. For what purpose, then, was this hue and cry raised? Simply, with the hope that it would alarm the stockholders and prevent them from uniting in defence of their rights. It came with a bad grace from such a quarter; from men who had been intimately identified as the officers and agents of the old company, and had continued in office through every administration; who had commenced their career by saddling the company with a stock debt in the shape of a bonus of \$800,000, which they divided out among themselves as a consideration for transferring the charter, and who endorsed and defended all the past management of the company until it was their interest to raise the cry of bogus stock in order to enable them to hold on to property which they had no just title. That he was not surprised at the conduct of these men so much as he was at the course pursued by several of the leading presses and a few of the citizens of this city. The citizens of New Orleans had subscribed, and paid in cash, upwards of three hundred thousand dollars, to sustain this enterprise. They had been induced to do so by the very presses who were now denouncing him and his associates—men with whom he felt proud to be connected, and who enjoyed the unlimited confidence of the communities in which they lived—as “thimble riggers,” and a graceless set of swindlers. What was the true position of things? The new company was in possession of the property of these New Orleans stockholders, and refused to recognize their claims. Their President had declared previous to the sale, as had been charged and published, and which he had never denied, that when they bought the property they intended to cut off all stockholders, in Texas and out of it. Mr. Wigfall, another prominent member of this self-styled new company, had denounced the New Orleans stockholders, and said they ought to be burnt and their ashes scattered in the Mississippi river. They had recognized the Texas stockholders, as they had acknowledged, in order to build up Texas influence to maintain possession of this property. And now, as insecurely as they held it, and as indefensible as was their title, upon what terms did they propose to admit the stockholders of this city? They had published a proposition, with a “flourish of trumpets,” which was to be kept open for sixty days, to the effect that any one who had paid fifty dollars on a share of stock, who would pay over fifty dollars more, should have issued to him a full share of stock. In the first place, there were no shares of stock upon which fifty dollars had been paid, and consequently the proposition was devoid of intelligible meaning. Did they intend to cut off all who had not advanced an amount not equal to fifty dollars or all balances equal to that amount?

Giving their proposal the most liberal construction which could be claimed for it; and it meant, that when a stockholder had paid five dollars in stock he must pay over five dollars or lose all; if he had advanced ten thousand, twenty thousand, or twenty-five thousand, as had been done in this city, they must duplicate their subscription or forfeit their previous subscriptions. It would be unfair and unduly exacting, if the property was out of litigation. What could be, what ought to be said of it, in the position in which this new company is placed? It would be seen by every sensible man, that this overture of the new company, was impracticable—that no stockholders could be expected to comply with it—that it was made with no expectation that it would be for a moment favorably considered, and intended evidently as a mere pretext, miserable and transparent as it was, to justify these few men in holding on to the property of the Southern Pacific Railroad. The stockholders out of Texas, therefore, had nothing to hope from this Texas company. They were inextricably and hopelessly cut off, so far as they could be by this new company, from the moment they bought the property. On the contrary, if he succeeded, of which he entertained not the shadow of a doubt, they would be restored to the possession of property estimated at two millions of dollars, with a charter and franchise more valuable than that of any railroad company in the United States, and with a stock debt of some twenty-three hundred thousand dollars. He intended that the true issue should be made. If he succeeded, the stockholders of this city would realize at least one-half, two-thirds, or, as he believed, the full amount they had invested in this enterprise.

If gentlemen choose to occupy this position, after getting the merchants and business men of this city, through their flattering representations of gain, to advance their money to build this road, they need not think to escape the responsibility of their conduct. But for the course pursued by gentlemen of this city, and several prominent presses, whose duty it was to protect the public interests, the contest would long since have been ended in Texas, and our stockholders, the stockholders of this city, would have been placed in possession of their rights. This new company has derived aid and comfort from the New Orleans press. They have continued in wrong, and base their ultimate hope of success in maintaining possession of this munificent property, by the respect paid them by some of the leading papers of this city. And if these papers even at this late day, would characterize the proceedings in Texas in such terms as they should be—if, as they ought to do, they would embody the stockholders in defence of their right, and withdraw all encouragement or support from this new company, it would not be ninety days before the stockholders would be restored to their rights, the road relieved of every embarrassment, and under rapid construction.

It seems, he said, that he had been the special object of detraction and abuse. The purpose was evident. This new company imagined that if they could strike him down, the greatest obstacle to their success would be removed, and in this their efforts were fully seconded by the press of this city.

He had been told by a prominent member of new company, but for him, (Dr. F.,) they would have been in quiet possession of the road and property of “old company.”

But this new company had not only defamed him, but every prominent man who was connected with him. Mr. Post, whose reputation was established in this city and in New York; Mr. Morton, a gentleman who possessed a standing equal to any gentleman in Virginia; Col. Gorin, one of the first lawyers of Louisville, Ky.; Mr. Richardson, whose reputation for talent and integrity was unquestionable, had been denounced in almost equally bitter terms. Why should he care for abuse, and at being called a thimble-rigger, or a knave, when he was placed in such respectable company? He had been abused before, and had become somewhat accustomed to it. It had never deterred him, for a moment, from the fearless and full discharge of duty, or from assuming any responsibility required by his position.

Among his abusers in Texas, was Mr. Wigfall, a gentleman to whom he felt very kindly, and who really was very well disposed, and must not be understood as meaning what he said. For instance, he had told them what Mr. Wigfall had said about the New Orleans stockholders. Mr. W. had also expressed the opinion, about that time, that one of the most distinguished lawyers of this city was an old fool, simply, because he gave an opinion opposed to the sale under the trust deed. He was in the habit of saying bitter things even of his friends. His own associates—the strongest and most respectable—he had characterized in such terms as these: one he had denominated as a d—d thief; another as a d—d perjured scoundrel; a third as a d—d rascal; while he had spoken of the committee as composed of one d—d rascal and four fools. Why, then, should he care about Mr. Wigfall's denunciations? He had certainly said nothing worse of him than he had of his friends, and if he was to judge of him by the criterion afforded by these expressions of opinion, he

could come to no other conclusion than that Mr. Wigfall, after all, was a pretty good friend of his! And why not?

The Company having rejected all just propositions for a compromise, there was but one thing left; and that was for the stockholders to present an unbroken front in defence of their rights. He would answer for the result of the issue. There were already judgments against the Company, for which the property was bound to the amount of between twenty and twenty-five thousand dollars. At the next term of the District Court of Harrison county, there would be other judgments rendered amounting to upwards of \$120,000, near all of which he was abundantly able to meet with the funds and resources in his possession. Without a compromise, a sale is inevitable, and the property will fall again into our possession. The law of December, 1857, fully restores our rights under such a sale. This law was passed for our destruction; it may yet prove our salvation! We have, therefore, nothing to do but to prepare for the sale which must take place, buy in the property, replevy it, and set this new company adrift! If the stockholders would adhere to him, if they would be true to themselves, he would, in less than three months, not leave a vestige of this new Company. The “new co” had sown the wind, they might reap the whirlwind; they had promised destruction to others, but if they persisted in their course, ruin, inevitable and unavailing, awaited them!

This new company had attacked his credit and they had ridiculed the poverty of the old company. Upon this question, he flattered himself, “honors were easy.” Their President was sued, individually, for a comparatively small amount, in the federal court of Texas; his company was in the hands of the constable, and he found it impossible to meet the late judgments, and had consequently to take them up by injunction. If they were able to pay them, and would not do so, they were not just men; if they were not able, and professed to have the means to pay their debts, they were insincere. He and his company paid their debts promptly, when they were able to do so, and when they were without the means they frankly acknowledged their inability. Some of these men had on one occasion subscribed for twenty millions of stock; Mr. Wigfall was among them, and it had been seriously questioned whether they possessed the ability to meet so large a sum. And yet they were the gentlemen who attacked the credit of his company. Comment was unnecessary!

Dr. Fowlkes closed by showing the superior advantages of this route, and the munificent charter. There was enough of fortune in it to satisfy the cupidity of all, if there could be a union of feeling as there was intrinsically of interest, and nothing for any one in this controversy protracted by litigation. Let reason supplant passion and prejudice, and all may yet be well.

Statement showing my own payments towards this \$327,000 indebtedness as my loan, which was claimed in October, 1858, at date of compromise.

J. E. & J. S. Brown's debt, I hold $\frac{1}{2}$, which was Waggoner's interest.....	\$11,000
I have taken up and hold of the debts in this \$55,000 item and other debts in Texas, embraced in the \$327,000 list.....	15,000
I settled with R. Mills & Co., calculated in this list in January and before going to Texas, out of my own means.....	8,020
	\$34,020

I was prepared and stood ready to make payment of my entire loan towards this indebtedness, provided we had succeeded in this compromise. I had not only the entire amount, but much more at my command of available paper. I have paid my own means for the \$34,020,

and have this much added claims I hold against the company. In addition to this, I arranged in New Orleans before I left there for Texas, upwards of \$11,000 of the indebtedness of the Southern Pacific R. R. Co. 11,000 which is not included in this \$327,000 list presented and designed to be a part or whole provided for. This all is in addition to a large indebtedness from the Company to me, and no part of any loan made has been used except my own as above stated.

J. FOWLKES.

REPLY TO A CRY OF BOGUS STOCK.

OFFICE SOUTHERN PACIFIC R. R. Co.,
Marshall, Texas, Feb. 4, 1859.

DR. J. FOWLKES, President:

Dear Sir—We have been for many months engaged in making thorough and searching examinations of the issues of stock by this Company. In this examination we have traced out upwards of fifteen thousand certificates of stock, being nearly the whole number of issues, and have found the stock books of the Company correct, with the exception of slight clerical errors; and we have not found the slightest evidence of over issues, or issues of spurious stock. Yours, very respectfully,

D. C. WILDER,

Secretary S. P. R. R. Co.

A. T. SMITH, Accountant.

NEW YORK CENTRAL R. R. AND THE BUFFALO CONVENTION.

To the Editors of the Courier and Enquirer:

Studios attempts having been made of late to cast odium upon the managers of the New York Central Railroad Company, for their alleged instrumentality in the disruption of the Railroad Convention, which assembled at Buffalo on the 16th inst., the writer of this desires to lay before the public, and especially the citizens of our city, an exposition of the causes which led to that event.

Our city and the bearings of its future on the commercial traffic between the East and West had much weight in determining the policy which guided the New York Central on that occasion. New York, hitherto the undisputed commercial emporium of our continent, has learned, from the experiment of the recent St. Nicholas compact, that her vaunted supremacy is not beyond the reach of her Southern rivals, Philadelphia and Baltimore. Notwithstanding her magnificent harbor, her immense wealth, her enterprise and thrift, facts have demonstrated the existence of elements of competition which have created new tendencies of trade, and which counterbalance to a formidable extent, her supposed advantages. Since the opening of the Pennsylvania and Baltimore and Ohio Railways, she has felt a sensible diversion of her trade to those cities. With the increased facilities afforded by these new lines of communication, and the consequent reduction of the rates of transportation, they have been enabled to command a larger share of the Western business than at any former period. In proportion as these measures have been taken to overcome the inequality, her preponderance over her rivals will rapidly diminish. By this diversion of trade and its consequences, the New York Central Railway, the New York and Erie, and their westward connections, have likewise been affected. There is an intimate community of interest between these roads and the city of New York, with respect to the Western business. Whatever affects her prosperity, acts directly upon them. Boston and other cities at the East, and the more northern commercial cities of the West, also sympathize more or less in these disadvantages. All these localities, therefore, are concerned, no less than the great Northwestern Railway lines, in counteracting the injurious tendencies of trade which we have described. And herein we have the true solution of the causes which produced the rupture at Buffalo. The failure of the Convention to harmonize on the time of departure and arrival of their trains, though the ostensible, was not the real cause. Mr. Corning, in behalf of the New York Central, distinctly stated to the Convention that he acceded to the programme reported by the Committee on this subject, which programme was in accordance with the wishes of the New York and Erie, and the Southern lines. There was no disagreement between him and them on that point. The programme failed, as is well known, because of the inability of the Hudson River road to come into the arrangement. The grand difficulty lay back of all this.

It was known to most of the members of the Convention that the unequal operation of the St. Nicholas compact—for all the Northern and North Western roads had experienced its baneful effects—had turned an undue proportion of the business between the East and West to Philadelphia and Baltimore, and thence over the Pennsylvania and Baltimore and Ohio roads to the several points of destination. To continue that compact, therefore, without such modifications as would obviate the unjust discriminations which it contained in favor of Philadelphia and Baltimore, and against New York and other localities, would inflict a permanent injury upon the wide-spread interests which the North Western lines were bound to foster and protect. The representatives of the Southern lines, having profited largely

by that compact, were imperious in their demands, and were not disposed to yield the advantages it gave them. On the assembling of the Convention the spirit and temper of these gentlemen indicated anything but a conciliatory tone. In private conversation they repeatedly avowed their determination not to consent to the desired modification of the St. Nicholas compact. Mr. Hammond of Chicago, the only speaker who alluded to the matter on the floor of the Convention, retorted upon them as follows:—"No wonder," said he, "the Southern lines favor that arrangement, since it has proved so great an advantage to them. The agreement was unfair to the Northwest and had worked to their injury. The Baltimore and Ohio Road, especially, had gained by the contract, and Baltimore City had shared in this profit. The merchant of the West or Northwest, who made his purchases in New York, had been obliged to pay from \$3 to \$5 per ton more for his freight from that city than from Baltimore, thus directly enhancing Baltimore interests to the disadvantage of those of New York."

In these circumstances, what was to be done? What course was left for the New York Central, if she would protect her own and the interests with which she was allied, but to insist on the modification of the St. Nicholas compact? When the New York Central became a party to that compact, its managers consented to its unjust discrimination in favor of Philadelphia and Baltimore and their respective routes, with extreme reluctance; but, influenced by a desire of harmony, and the persistence of the President of the New York and Erie, who voted with the Southern lines, they yielded for the time being, in the hope of soon effecting a satisfactory revision. The time had now come when that revision should be made.

We will not occupy space here to correct the misrepresentations of the course pursued by the New York Central in reference to this compact as set forth by Mr. Garrett, of Baltimore, on the floor of the Convention. He and his coadjutors, the representatives of the Pennsylvania and Baltimore and Ohio, and New York and Erie, dealt profusely in criminations against the managers of the New York Central. Mr. Corning, conscious both of the wisdom and the rectitude of his position, allowed these gentlemen to indulge in personal vituperation to their heart's content. Choosing to confine himself strictly to the business in hand, his aim was to profit by the experience of the past, and to give a shape to the railroad policy of the great Northern and Western route which would inure to the advantage of its traffic, and also to restore to the city of New York and the other localities, with whose business the Central road is so closely identified, the trade which had been wrested from them. In justification of his course we appeal to facts, and commend these facts to the special consideration of the merchants of the city of New York.

By the operation of the St. Nicholas compact, the discriminations on freight in favor of Philadelphia and Baltimore, as against New York, were as follows:

All Rail rates in cents per 100 lbs.

On the 1st, 2d, 3d, 4th and special classes, the rates

FROM PHILADELPHIA	
To Cincinnati	are 20, 15, 10, 10, 10 less than from N. Y.
To Columbus	are 20, 15, 10, 10, 10 less than from N. Y.
To Cleveland	are 5, 0, 5, 5, 8 less than from N. Y.
To Indianapolis	are 20, 15, 10, 10, 10 less than from N. Y.
To Chicago	are 20, 15, 10, 10, 10 less than from N. Y.
To St. Louis	are 20, 15, 10, 10, 10 less than from N. Y.

FROM BALTIMORE.

To Cincinnati	are 30, 25, 17, 15, 15 less than from N. Y.
To Columbus	are 30, 25, 20, 15, 15 less than from N. Y.
To Cleveland	are 5, 0, 5, 5, 8 less than from N. Y.
To Indianapolis	are 30, 25, 20, 15, 15 less than from N. Y.
To Chicago	are 20, 15, 10, 10, 10 less than from N. Y.
To St. Louis	are 30, 25, 20, 15, 15 less than from N. Y.

Rail and Water Rates in cents per 100 lbs.

FROM PHILADELPHIA	
To Cincinnati	are 27, 17, 15, 10, 10 less than from N. Y.
To Louisville	are 30, 23, 17, 13, 13 less than from N. Y.
To St. Louis	are 30, 15, 20, 15, 15 less than from N. Y.
To Alton	are 30, 15, 20, 15, 15 less than from N. Y.

FROM BALTIMORE.

To Cincinnati	are 30, 22, 20, 15, 15, less than from N. Y.
To Louisville	are 35, 24, 22, 18, 18 less than from N. Y.
To St. Louis	are 35, 20, 25, 20, 20 less than from N. Y.
To Alton	are 35, 20, 25, 20, 20 less than from N. Y.

It is not necessary to specify the articles enumerated under the several classification in order to show the gross injustice done to the commerce of New York by these discriminations. No one will fail to see that, so long as the Philadelphia or Baltimore merchant is placed in point of price from \$3 to \$6, and in some cases \$7 per ton nearer to the common points of the West than the New York merchant, he has an advantage with which it is difficult to contend. In the item of raw copper, which ranks in the lowest classification, the difference against New York and in favor of Baltimore on a sale to St. Louis, Louisville or Cincinnati, is equal to \$3 per ton, and in favor of Philadelphia to \$2. The discrimination on numerous other articles is glaringly marked. Let us here notice the fact that the manufactures of New England, which enter largely into our internal commerce, are shipped from Boston, Providence, &c., and laid down in Philadelphia and Baltimore at the same price as in New York. No more is charged for carrying them to the two former places than to the latter. Will, then, the merchant from the West and Southwest purchase these goods at New York, when he can transport them homeward at a less cost of from \$3 to \$6 per ton from Philadelphia and Baltimore? It is idle to suppose it. Prices being equal, he will seek those points at the seaboard from which he can transport his goods at the cheapest rates.

Several of the leading mercantile firms of New York, in

a memorial to Mr. Corning, in reference to the discriminations in favor of Philadelphia, dated the 20th of January last, say:

"In our judgment the true interests of the New York Central and the New York and Erie Roads and their Western connections will be best promoted by insisting upon the same route for freight from both cities. Under existing routes Philadelphia has the advantage in having less miles of railroad to reach the West, but, with a direct Western road from this city, that difference would be equalized. Is it not the policy of the New York Central and Erie roads to claim and insist upon that equality now?"

"We take the liberty of presenting this matter for your consideration, feeling deeply impressed with its importance, and trust you will pardon us for thus trespassing upon you." In a postscript they add, "we have no doubt that every House in the city would unite in this communication if presented to them."

On the 18th of February another memorial, more numerously signed, was presented to the Presidents of the New York Central and New York and Erie Roads. The memorialists say:

"The undersigned beg leave to represent to you that the present discrimination in rates of transportation per railroad to points West, in favor of Baltimore and Philadelphia, and against New York, is operating to the great injury of the trade of this city, and, in the judgment of the undersigned, against the interests of your roads. The present arrangement throws the business into the hands of Philadelphia and Baltimore nevertheless. We lose the business, and of course you lose the transportation. In the opinion of the undersigned, goods should be carried from this city to Cincinnati, Louisville, St. Louis, &c., as cheaply as they are from Philadelphia and Baltimore."

Mr. Corning on behalf of the New York Central, replied under date of March 12th:

"You are aware, no doubt, that, at the meeting of the four lines, recently held in New York, this subject was not definitely acted upon, but is expected to be disposed of at the adjourned meeting to be held in Buffalo on the 16th inst. On that occasion this Company will make renewed efforts to reduce the differences in freights to which you refer, to a point so small as barely to cover the extra cost of the increased distances, in order to meet the reasonable wishes of the mercantile interests of New York."

"It may not be amiss again to remind you that the cordial co-operation of the New York and Erie Railroad in this matter is most essential, and I hope that you and your associates will use every effort to induce that Company (which is so especially under New York influence) to take ground with us in support of the business and interests of your city. But should we, unfortunately, fail in this movement, and be forced to dissent from our associates, terminate the agreement, and give up its advantages, we shall look to the pledged faith of you and your associates, and, indeed, to the entire mercantile interests of New York to support us by your business and influence in our efforts to promote the trade and sustain the commercial supremacy of your City."

The result at Buffalo is known. Understanding the position of the parties, and despairing of any suitable compromise, the Convention adjourned without taking action on the subject. To the surprise of a large majority of the Convention, the President of the New York and Erie not only withheld co-operation with the New York Central, but threw his entire influence and action with the Southern lines.

It now remains to be seen whether the merchants and citizens of New York will rally, as in duty bound, to the support of the New York Central in her position. So far as the trade of New York is concerned, every holder of real estate, every resident and property-holder, every manufacturer, banker, and business man is alike interested. Should they fail to aid in this movement, and the trade in question be lost to the City, they are the greatest sufferers. To them the result is of momentous consequence. They should not forget the lessons which commercial history has taught them respecting the stealthy influence of change of rivalry in the diversion of trade. New York can no more allow these rival cities to tap and turn to their own use the waters of her noble Croton than she can a like diversion of her commerce.

The question now to be decided is, whether, with respect to a large portion of her trade, she will convert her stores into show rooms for the exhibition of samples merely, and send the orders of the purchaser to be filled at Philadelphia and Baltimore, to which points corresponding importations will tend, or whether she will transact the entire business and reap the profits? Let her then grasp the opportunity presented and exert her united energies in favor of that line of transportation whose policy is to maintain her trade. She owes it to herself. Mutual interest requires it; mutual co-operation will effect it; distraction will defeat it.

Entire reliance may be placed in the determination of the managers of the New York Central to adopt this favorable policy towards our City, and there need be no apprehension of a want of fidelity or firmness in its execution, provided our merchants and citizens reciprocate the good-will of this Company by corresponding co-operation.

NEW YORK.

Thursday, March 31, 1859.

GREAT WESTERN (CANADA) RAILWAY.—The following is the traffic report for the week ending March 25, 1859:

Passengers.....	\$20,654 30
Freight and Live Stock.....	16,448 74
Mails and Sundries.....	1,366 32
Total.....	\$38,469 36
Corresponding week of last year.....	50,745 56
Decrease.....	\$12,276 20

N. Y. CENTRAL R. R.—EASTERN DIVISION.—STATEMENT OF THE RUNNING EXPENSES AND COST FOR REPAIRS OF LOCOMOTIVE ENGINES, FOR THE MONTH OF FEBRUARY, 1859.

Number of miles run.....	59,015
Number of Engines on Division.....	50
Cords of Wood consumed.....	1526
Cost of Wood.....	\$5,343 64
Cost of Oil, Pork and Waste.....	478 39
Cost of Engineers, Firemen and Wipers.....	2,642 43
Cost for Labor for Repairs.....	943 45
Cost for Material for Repairs.....	584 96

Total Cost.....	\$9,952 87
Average number of miles run by each engine.....	1,595
Average number of miles run to one cord of Wood, 38.65-100	
Average number of miles run to one Pint of Oil.....	18.29-100
Average cost, per mile run, for Wood.....	9.05-100
Average cost, per mile run, for Oil, Pork and Waste.....	0.81-100
Average cost, per mile run, for Engineers, Firemen and Wipers.....	4.40-100
Average cost, per mile run, for Repairs.....	2.58-100
Total cost, per mile, for Running Expenses and Repairs.....	16.86-100
Cost per mile run, as above, for repairs of Engines built at Schenectady Locomotive Works.....	1.69-100
Cost per mile run, as above, for repairs of Engines of all other builders' engines.....	5.18-100
Number of men employed.....	152

TABLE showing the Aggregate number of Miles of each Gradient on the Main Line of N. Y. Central R. R. from Schenectady to Utica, and from Utica to Syracuse.

GRADE.	LENGTH IN MILES.	Schenectady to Utica.	Utica to Syracuse.
Level.....	35.50	9.09	
9 to 5 feet per mile.....	17.65	17	
5 to 10 feet ".....	20.78	7.21	
10 to 15 ".....	0.75	12.14	
15 to 20 ".....	1.22	5.93	
20 to 25 ".....	1.93	.....
25 to 30 ".....	.....	0.96	
30 to 35 ".....	.....	0.38	

MICHIGAN SOUTHERN RAILROAD.

ABSTRACT OF THE ANNUAL REPORT OF MICHIGAN SOUTHERN AND NORTHERN INDIANA R. R. CO.

Capital Stock—Common.....	\$6,081,800
Guaranteed.....	2,893,600
	\$8,975,400 00
Funded debt.....	9,343,000 00
Floating debt, Nov., 1857.....	\$2,314,000
Jan. 1, 1858.....	1,935,000
March 1, 1859.....	1,211,000 07
Earnings in 1858:	
Passengers, Mails and Express.....	\$997,578 27
Freight and Storage.....	872,419 14
Miscellaneous.....	149,432 55
	\$2,019,424 96
Expenses.....	\$1,242,152 23
Interest and Payment to Sinking Fund.....	775,981 65
	2,018,133 88

The net earnings, exclusive of interest, are.....\$777,273 73
Same in 1857.....544,311 19

Net gain in 1858.....\$232,461 54

Comparison of 1857 and 1858—Force and Pay of Men.

Time.	No. Men.	Pay Rolls.
1857—October.....	3,240	\$95,130 92
1858—January.....	1,725	52,842 01
December.....	1,516	51,477 73
1859—February.....	1,506	46,462 40
Earnings.....	1857.....	1858.....
Expenses.....	\$2,227,978	\$2,019,424
Repairs of Road.....	1,652,299	1,232,151
Repairs of Engines.....	423,825	315,153
Repairs of Cars.....	158,791	97,443
Fuel.....	147,098	69,855
Passengers Carried.....	164,000	108,433
Tons of Freight.....	534,550	412,929
Passenger Earnings.....	234,804	261,618
Freight Earnings.....	1,316,478	920,866
Per cent. Expenses to Earnings.....	838,053	847,162
	74	61—61½

[Extract from the closing part of the Report.]

A reference to the last table will show that the decrease of business upon our road can not be ascribed to the competition of other lines, by drawing off business legitimately belonging to ours. For it appears by this table that the gross earnings of all of the ten large roads named have materially decreased during 1858. The per centage of decrease of the aggregate of gross earnings of those roads is 25.75, while upon ours the decrease is only 9.36 per cent, and it will be noted that our decrease in expenses is 25 per cent.

If the gross earnings of 1858 were equal to those of 1856, which were.....\$2,714,848
With the expenses and interest account of 1858, at.....2,018,133

There would have been a net surplus of....\$696,715
This would give 10 per cent. on \$2,893,600 of guaranteed stock.....\$289,360
And 6 per cent. on \$6,081,800 common.....864,998
\$654,968

And leave a surplus of.....\$42,447

A clear evidence that a revival of business only is necessary to enable the Company to increase dividends. As an earnest that such a revival has commenced, a reference to schedule I annexed, shows that the gross earnings of the first half of 1858, were.....\$932,929 46
And for the last half of 1858, were.....1,022,819 97

A gain in favor of the late six months of.....\$147,890 51

The constant increase of the local or way business in comparison with the through is a gratifying feature in the business of the road. This is a business which can not materially be interfered with by any efforts of competing roads. The earnings are comparatively as follows:

	Through traffic.	Way traffic.
1857.....	\$1,219,292 34	\$474,292 75
1858.....	838,109 01	1,008,792 72
Decrease.....	\$381,183 33	
Increase.....		\$532,499 97

This shows the capacity of the country along and within the influence of our lines to expand and enlarge. And it is worthy of note that this expansion and increase of local traffic have gone regularly forward the last year, amid the general depression of business and the comparative decrease of earnings from through traffic.

It is proper to add that whatever rumors there may have been in regard to a declaration of a dividend on the guaranteed stock, they have not proceeded from or been authorized by the Company or its officers. While the Board, as already mentioned, are disappointed at the amount of the business of the year, they have at no time contemplated dividends without earnings and in hand applicable to that object.

MONETARY AND COMMERCIAL.

Since our last issue there has been increasing ease felt in the money market, from the cause noted at that date. There is, however, no serious excess of supply over the demand, but there is enough to absorb all first class paper and prevent its making its way into the hands of street brokers. Rates as previously quoted, 10@12 per cent.

Eastern Exchange is in good supply at ½ prem. New Orleans 3-8 prem.

The Courier and Enquirer of Monday says:

Money is becoming more abundant than before reported.

Among the cheerful features of the market are more prompt returns from the North-west for indebtedness to our city. Our bankers and merchants report a much better state of things in Minnesota, Iowa, and Illinois, etc. One year's full crops are all that are now necessary to restore the North-West to the activity which prevailed two years ago.

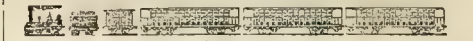
The Stock Market is well sustained to-day. There are larger orders from outside parties at advanced values. The Western Railroads are at very low prices yet, and their business must secure in 1859-'60, a liberal advance on present quotations.

The New Orleans Crescent of the 1st says:

The most important feature appertaining to finance to-day was the announcement of a counterfeit on the Citizens' Bank in its \$10 notes. This is one of the most dangerous counterfeits yet come to light, only equalled by the bogus gold pieces which are in circulation. The intelligence of the counterfeit was received from the agents in Galveston, Texas, being received there from the interior of the State, and must have been divulged by one of the confederates in the iniquity, for there is not one person in a thousand accustomed to the handling of money who can discern the difference between the genuine and the counterfeit notes. The officers of the bank, on closely scrutinizing, discovered that the engraving and the shading of the counterfeit notes are different, as also are the figures, which have a coarse appearance, particularly in the figures in the left hand corner, the flowering around the word ten,

and around the other ten of the notes. It puzzled at first both the President and Cashier to identify the variations. It is impossible to say what amount of these false issues are out. It can not be much, as some of the gang have blown too quick.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE

—TO—

WASHINGTON CITY,
BALTIMORE,
PHILADELPHIA,
NEW YORK,
AND BOSTON.

THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK AND BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

WASHINGTON CITY.

TWO TRAINS LEAVE CINCINNATI DAILY,

(Sundays Excepted.)

9 A. M. and 11:30 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 9 and 11:30 P. M. trains.

The above Trains arrive in Baltimore at 7:35 A. M., 5:05 P. M., in Washington 10:40 A. M., 7:05 P. M.

Inquire or Tickets via BALTIMORE & OHIO RAILROAD.

FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:30 A. M., 8:50 A. M., 3:30 P. M., and 5:30 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK AND BOSTON.

FOR THROUGH TICKETS,

And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRESCOTT SMITH, Master of Transportation Baltimore and Ohio Railroad.

L. M. COLE,
General Ticket Agent.
E. F. FULLER,
General Western Agent.

WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c., executed in the highest style of the art.

MIDDLETON, STROBRIDGE & CO.,
Jan 8 ly 119 Walnut st., Odd Fellows' Building

OLD STAND.

Railroad and Car Findings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

Locomotive & Hand Lanterns, ENAMELLED HEAD LININGS,

Brass and Silver Trimmings,

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, and iron Forgings of almost every description, etc., etc., at the OLD STAND,

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, de from our regular business, respectfully solicited

ALBERT BRIDGES.
Of the late firm of Bridges & Bro
eb4tr JOEL C. LANE

INSTRUMENTS.

CATALOGUE CONTAINING 250 Illustrations of Mathematical, Optical and Philosophical Instruments, with attachment of a large sheet representing the Swiss Instruments in their actual size and shape, will be delivered, on application, to all parts of the United States, by sending 12 cents in Postage Stamps.

C. T. AMSLER,
No. 635 Chestnut St., Philadelphia.

5cww.3m.

LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY, NOVEMBER 29th, 1858, Trains leave Cincinnati as follows:

9 A. M. DAY EXPRESS—Stopping at Way Stations.

4:15 P. M. ACCOMMODATION—For Xenia and Springfield, stopping at intermediate stations.

11:30 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Corwin, Xenia, and London

Connections are Made by the 9 A. M., and 11:30 P. M. Trains for

ALL THE EASTERN CITIES.

The NIGHT EXPRESS Train leaving Cincinnati at 11:30 P. M., runs daily, except SATURDAYS. The other trains run daily, except SUNDAYS.

FOR THROUGH TICKETS

And all information, apply at the Offices, Walnut Street House, bet. Sixth and Seventh; No. 1 Burnet House; south-east corner of Broadway and Front streets; and at the Eastern Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Superintendent.

Omnibus calls for passengers.

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about lbs. per yard, "Eric" pattern, of best quality Welsh make, now ready for delivery, for sale by

VOSE, LIVINGSTON & CO.,
9 South William St., N. Y.

1,200 Kegs No. 1 Railroad Spikes, 5½ for 9-16th, Corby, Gossin & Co's make, for sale very low by

TRABER & AUBERY,
7 Public Landing

A Book for Every Business Man!

JUST PUBLISHED

—THE—

POST-OFFICE GUIDE!

For Post-Masters and Business Men.

CONTAINING

A Complete List of Post-Offices in the United States and Territories, arranged by States and Counties; A Complete List of all Distributing Post-Offices; Rates of Foreign and Domestic Letter Postage; Rates of Printed Matter, Transient and Regular; Abstract of the Laws and Regulations of the Post-Office Department, &c., &c.

COMPILED BY E. PENROSE JONES,

Late Assistant Post-Master at Cincinnati.

Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.

U. S. BLANK AGENCY, CINCINNATI Post-Office, }
January, 1859.

This work has been carefully compiled and corrected by E. PENROSE JONES, Esq., late Assistant Post-Master of the Cincinnati P. O., from the Records in this Department, and other sources, and contains the most complete list of Post-Offices especially of the Western, North-Western, and South-Western States, yet published.

MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an active pamphlet of about 100 pages. The entire matter is kept standing in type, and as the compiler is promptly advised of all New Offices, Changes and Regulations of the Department, the information is corrected up to the last day of publication, an advantage possessed by no other work of the kind.

OBSERVE. That this list is arranged by States and Counties, making it especially valuable to business men. No similar arrangement has been published since 1856. There are 3000 more offices in this than in any book heretofore issued. The Price is one-half that of any work of the kind now published.

Single copies sent by mail (postage prepaid) to any address, upon receiving Twenty-five Cents in Silver or Postage Stamps. Five Copies sent for \$1.00, or Twelve Copies for \$2.00.

C. S. WILLIAMS,
194 Walnut Street,
Cincinnati, Ohio.
Mar 10. t.

McCALLUM, BRISTOL & CO., BRIDGE & DEPOT BUILDERS.

McCallum, Bristol & Co., are prepared to construct McCALLUM'S PATENT INFLEXIBLE ARCH TRUSS BRIDGE, for Railroad and Highway purposes at any point in Ohio, Indiana, Illinois, Missouri, Iowa, Wisconsin and Minnesota on as favorable terms as any other bridge, and in the most approved and perfect manner. Parties desiring information, will please apply to the firm at their Office 99 Third St., Cincinnati, or to McCallum, Seymour & Hawley, No. 110 Broadway, N. Y. Ag. 26.

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.
SOLE IMPORTERS.

PROSSER'S PATENT SURFACE CONDENSERS for high pressure steam, with sea or other bad boiler water, gauges, 3-cutter drills, counter-sinks, tube-end cutting bars, expanders, tube sealers, steel wire and whalebone brushes, pull lever wrenches, tubes—plain or enameled, screwed together for Artesian Wells. Hollow Slabs for various purposes. Steel for Rollers.
THOS. PROSSER & SON,
27 Jan. 28 Platt Street, New York.

LANE & BODLEY MANUFACTURERS OF WOOD WORKING MACHINERY, AND CIRCULAR SAW MILLS.

Lane & Bodley's celebrated Power Motoring Machine and all Machinery used in Rail Car Shops.

Corner John and Water Sts., CINCINNATI, O.
Jan. 5. t.

WRIGHTSON & CO., BOOK & JOB PRINTERS, NO. 167 WALNUT STREET, CINCINNATI, O.

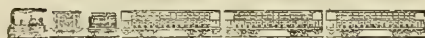
Public attention is respectfully directed to this establishment, in the assurance that ample satisfaction will be given as regards Typography, Press Work, and Charges, to those who may require Ornamental, Common, or Book Printing, Printing from Stereotype Plates. We are better prepared to do business in this line than other house in the West.

Druggists Labels,

Are printed in the neatest manner, in Gold Silver, or Copper Bronze, on Satin, Splendid Glazed Colored Papers, or Cards, unequalled for brilliancy, at very low prices.

1853 1858.

CINCINNATI AND ST. LOUIS. Through without Change of Cars, OHIO & MISSISSIPPI (BROAD GAUGE)



RAILROAD.

TWO DAILY TRAINS FOR
Louisville, Vincennes, Evansville,
Cairo, and St. Louis,
At 9:00 A. M. and 10:30 P. M.

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

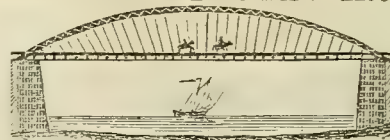
One Through Train on Sunday, at 10:30 P. M.
ACCOMMODATION TRAIN at 5:20 P. M., daily, (Sundays excepted.) for Seymour.

FOR THROUGH TICKETS

To all points West and South please apply at the Union offices, No. 2 Burnet House; south-east corner Broadway and Front street, and at the Depot, corner Front and Mill streets.

P. W. STRADER, General Ticket Agent.
Omnibuses call for passengers.

MOSELEY'S TUBULAR WROUGHT IRON



ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs, are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeting always Iron.

The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges

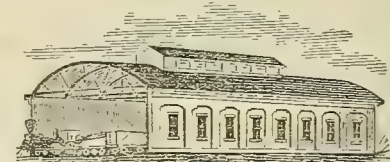
We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.

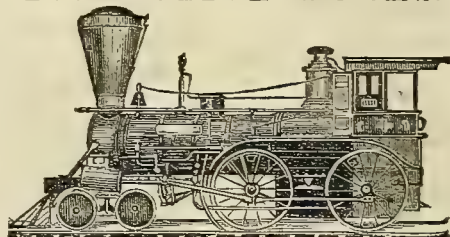


We can furnish iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O. may 13.

MOSELEY & CO.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slottting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

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MOORE & RICHARDSON.

THE KENTUCKY MILITARY INSTITUTE,

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, but more extended in Mathematics, Mechanics, Machines, Construction, Agricultural Chemistry and Mining Geology; also in English Literature, Historical Readings, and Modern Languages, accompanied by daily and regulated exercise.

Schools of Architecture, Engineering, Commerce, Medicine, and Law, admit of selecting studies to suit time means, and object of Professional preparation, both before and after graduating.

The twelfth annual term is now open. Charges, \$102 per half-yearly session, payable in advance.

Address the Superintendent, at "Military Institute, Franklin Springs, Ky.," or the undersigned.

P. DUDLEY,

President of the Board.

Jan. 5. t.

Union Works, Baltimore.

POOLE & HUNT,

Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

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—AND—

Blank Book Manufacturers,

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East Side, between Third and Fourth Streets,

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,

Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

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(SUCCESSORS TO JACOB ERNST.)

112, Main Street, Cincinnati

SCHENECTADY

Locomotive Works,

SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,

AND TENDERS, AND

RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding the work to any part of the country, without delay.

JOHN ELLIS, Agent.

WALTER McQUEEN Sup't.

N. B.—We have two Freight Engines on hand suitable for the 4 feet 10 in. gauge. Cylinders 16 inches diameter, 22 inches stroke. Driving wheels 4½ feet diam. December 18th, 1858.

D. M. CARHART,

TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address, Respectfully Yours,

D. M. CARHART,
Box 183, Cleveland, Ohio.

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Mathematical Instrument Makers

Removed to No. 67 West 6th St.

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Wilmington - - - - - Delaware.

MANUFACTURERS OF

CHILLED WHEELS

AND

TIRES,

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent

FOR THEIR

CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE.

WITH OR WITHOUT AXLES.

WHEELS FITTED

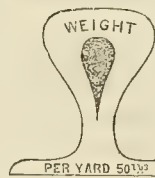
To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

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TUBULAR RAIL.



Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America, by STEPHENS & JENKINS, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:

The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater.
Its welding nearer perfect, and
Its durability superior.

Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

Additional particulars and circulars may be had by addressing
E. W. STEPHENS,
Cincinnati, Ohio.

AMERICAN AND FOREIGN PATENT AGENT.

THOMAS D. STETSON,

SOLICITOR OF PATENTS,

And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

Winter Arrangement.

BALTIMORE AND OHIO



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GREAT NATIONAL ROUTE.

TERMINATES AT WASHINGTON and BALTIMORE on the East, and Wheeling, Beckwood, and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the

West, South-West and North-West.

TWO TRAINS

Leave Wheeling daily, at 12:20 P. M., and 10:26 P. M.

Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.

Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone, by other lines.

Time as quick and fare as low as via any other Route.

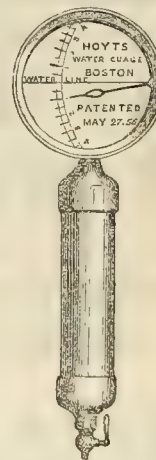
Inquire for tickets via the Baltimore and Ohio Railroad, at any of the principal Railroad Offices in the West.

E. F. FULLER, Gen'l Western Agent.

L. M. COLE, General Ticket Agent.

W. P. SMITH, Master Transportation.

HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,
No. 66 Broadway, N. Y.

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

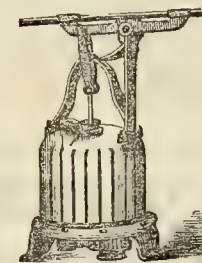
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps, as the best Pump now in use; and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings, Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855—73

ENGINEERING!!

The undersigned is prepared to furnish

SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c

Particular attention given to the superintending of

LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description,

While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN and NOYES

METALLIC SELF ADJUSTING CONICAL PACKING,

Also, for Water Gauges, Indicators, Steam Whistles

CHAS. W. COPELAND,
Consulting Engineer,
64 Broadway, N. Y.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,

THEODORE DEHON,

no13 10 Wal

ar Broadway, New York.

The Great Arnold Secret Discovered at Last.

BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.

MANUFACTORY NO. 39 VINE ST.,
CINCINNATI, OHIO.

READ THIS!

I have, at the request of Messrs. Cook, Merritt & Brown, Wholesale Stationers, 18 Beekman Street, New York, analysed two samples of FLUID INK, one marked *Arnold's Chemical Writing Fluid, P. & J. Arnold, London*. The other—BUTLER'S MERCANTILE RECORD FLUID, CINCINNATI.

I find both of these INKS to contain the same ingredients, and in the same state of combination. From the result of the various tests to which I have subjected them, I find that they are equal in *quality as well as durability*.

JAMES R. CHILTON, M. D., Chemist.

New York, November 9, 1859.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. RECORD.—For Ledgers and Records Only. MERCANTILE.—For Books, Letters, and General Purposes. COPYING.—For Letter Press only. Have had awarded them Fourteen Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

Transportation Office, Cincinnati, Hamilton and Dayton Railroad.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial.

Yours, truly,

J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio & Mississippi; Central Ohio; Baltimore & Ohio; Jackson and Vicksburg; Bellefontaine and Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena and Chicago; Michigan Southern & Northern Indiana; and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B.—Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of weight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

GENERAL

RAILWAY SUPPLY AGENCY.

SNOOK & HILL'S PATENT

LOCOMOTIVE LAMPS.

83 Liberty Street, Cor. of Broadway,
NEW YORK.

JOHN W. KELLY MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

RAILROAD ENGINES & CARS,

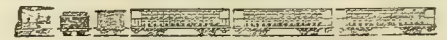
ALSO AGENT FOR THE SALE OF

HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,

JUDSON'S GOVER OR VALVE.

Orders solicited and promptly filled.

Cincinnati, Hamilton and Dayton,



RAILROAD.

FOUR TRAINS

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G. A. M. MAIL TRAIN, connects at Dayton with Sandusky, Dayton and Cincinnati Road, for Springfield and Sandusky—at URBANA, for Columbus—at CLYDE, for Cleveland and Buffalo, Toledo, Detroit and Chicago, arriving at Detroit at 5:30 P. M. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Munice. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

8:40 A. M. TRAIN, for Cleveland and Pittsburg, via Delaware, makes close connection at CRESTLINE, for Pittsburg, Baltimore, Philadelphia, and New York; and at CLEVELAND for Dunkirk, Buffalo, Boston and New York.

4:30 P. M. TRAIN, for Springfield and Sandusky—connects at FOREST, for Chicago—at CLYDE, for Toledo—at SANDUSKY, for Cleveland and the East. Connects also at DAYTON, for Troy, Piqua, Sidney, Lima, and Chicago—at SIDNEY, for Pittsburg and the East. Also connects at RICHMOND, for Indianapolis, Terre Haute, St. Louis and Chicago.

5:40 P. M. TRAIN, for Hamilton and all way stations.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; No. 3 Burnet House; or at the Sixth Street Depot.

D. McLAREN, Superintendent.

GEO. H. KNIGHT & BROTHER,
Patent Attorneys,

N. E. Corner Vine & 4th.

A CARD.

I take pleasure in announcing that all difficulties between my former partners, in the firm of APPLEGATE & Co., and myself have been amicably adjusted. The business will be continued by them, at the old stand, they settling all the business connected with the firm.

I do not hesitate to recommend my friends to make their purchases of them, as I believe they will find it to their advantage to do so.

JOHN B. RYAN,
Late of the Firm of APPLEGATE & Co.,
Booksellers and Stationers.
Cincinnati, March 1st, 1859.

In referring to the above Card, we take the opportunity of saying to our friends and the public, that the business as heretofore conducted by us, will be continued at the same place and under the same name and style as formerly.

Our stock is very large and varied, having just been replenished for our spring sale. We are prepared to fill all orders, at lowest prices, with promptness and dispatch, guaranteeing satisfaction to all who may favor us with their orders.

We trust by continued exertions to merit a continuance of past favors.

JAMES APPLEGATE,
SAM'L FLICKENGER,
ARTHUR H. POUNSFORD.

Cincinnati, March 1st, 1859.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw and Drills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio;
LEE & LEAVITT

The Railroad Record.

E. D. MANSFIELD, } Editors.
T. WRIGHTSON, }

CINCINNATI:

Thursday Morning, April 14, 1859.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$9 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

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A square is the space occupied by ten lines of Nonpareil.

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THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

Railroad Presidents, Superintendents and Secretaries, are requested to send us copies of all Annual and other Reports they may issue, together with their Monthly Statements, and such other matters of interest as they may be willing to furnish us

To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

BOOK FOR THE MILLION.—Interest; a new, easy and infallible system of computing interest on all sums, at any rate, from one day to six months.

The author of this little work has done real service to all dealers in money, merchants, traders, and in fact all who have anything to do with financial matters. The author says:

My aim in preparing this book has been to make the calculating of interest so easy and simple, that every person of ordinary capacity can compute it correctly; and will therefore be under no obligations to others to do that for him which he is enabled to do for himself. If my success in this endeavor has been equal to the good will with which I have labored, I am satisfied.

For sale by Applegate & Co., No. 43 Main street, Cin.

The earnings of the North Pennsylvania Railroad for the last month are as follows:

March, 1859.....	\$28,244 84
March, 1858.....	25,869 06

Increase..... \$2,355 76

First four months of fiscal year.....	\$98,965 09
Same time last year.....	85,603 53

Increase..... \$13,351 56

The earnings of the Buffalo, New York and Erie Railroad, from Buffalo to Corning, 142 miles, for March, 1859, are \$48,664 14.

EXPORTS OF OHIO—THE SOURCE OF RAILROAD FREIGHTS—BUSINESS OF OHIO RAILROADS.

It may be safely assumed, that a country which can not export, can not import; and, therefore, it can furnish no freight for railroads, of any importance. The freight traffic of railroads must, therefore, depend almost entirely on the ability of the country in which it immediately lies, to produce a surplus, and export that surplus to market. In this view, it becomes necessary, if we would know the value of any particular railroad, to know the precise statistics of the country through which it passes, and its capacity to send off surplus produce. For, granting as we obviously must, that the passenger traffic is, after all, the largest; yet, it is quite obvious, that the passenger traffic must depend to a considerable extent on the freight; for the large body of business men who travel, travel in connection with their business, which arises from the exports and imports of the country. On this subject, we have given our readers from time to time, all the statistics in our power. In the *RECORD* for 1852, will be found a complete table of the exports of Ohio. A re-examination of the materials, and the additional facts communicated in the last Report of the Commissioner of Statistics, prove that table to have been very nearly accurate. The Report on Statistics gives a similar table for the year 1858. We shall compare these tables, and also show how large a proportion of produce has been carried off by railroads.

The tables of 1852 and 1858, presented by the Commissioner, are as follows:

	Value of exports in 1852.	Value of exports in 1858.
Flour and wheat.....	\$15,738,916	\$11,111,518
Other grains.....	3,272,000	1,750,000
Beef and cattle.....	2,394,750	6,165,551
Pork, lard, lard oil and hogs..	7,994,290	13,885,302
Butter, Cheese, Tallow and grease.....	750,000	1,734,382
Whisky.....	2,850,000	5,109,953
Tobacco.....	1,617,480	2,197,125
Wool.....	2,100,000	2,649,466
Miscellaneous articles, such as apples, beans, eggs, oil cake, etc., etc.....	500,000	800,000
Articles manufactured from products of agriculture, such as candles, soap, etc., etc....	3,000,000	3,000,000
Aggregate values.....	\$40,216,738	\$48,403,297

To the exports of 1858, the Commissioner adds nearly \$2,000,000 for horses, sheep, and coal, not included in the table of 1852, making an export of over *fifty millions* from Ohio, in the produce (direct or indirect) of the soil. This implies necessarily an equal amount of imports. And in this exportation and importation, we see how it is, that many of the roads in this State have so large a business.

The Commissioner of Statistics has furnished another table, showing in what *modes* this traffic was carried on, and it is a very instructive one, in regard to the progress and influence of railroads, in the business of the country.

EXPORTS OF OHIO FOR THE COMMERCIAL YEAR 1857-'58.

ARTICLES.	Exports by Railroads.	Exports by Lake.	Exports by River.	Exports, Aggregate.
Flour, bbls.....	1,097,582	475,927	227,470	1,800,979 bbls.
Wheat, bushels.....	2,007,113	2,007,113	2,607,113 bush.	2,607,113 bush.
Other Grain, bushels.....	956,585	1,990,657	40,000	2,987,242
Whisky, bbls.....	142,370	53,981	181,556	377,907 bbls.
Alcohol, bbls.....	.....	.....	59,071	59,071
Beef, do.....	6,000	927	14,200	20,427
Pork and Bacon, bbls.....	361,541	7,116	95,200	461,457
Lard, bbls.....	65,000	720	18,475	46,195
Lard Oil, bbls.....	5,000	.....	40,555	45,555
Butter, bbls.....	7,292,719	18,680	1,454,725	8,735,124 bbls.
Cheese, bbls.....	3,541,337	14,795	3,160,000	6,726,132
Candles, boxes.....	.....	33,560	155,297	188,857 boxes
Soap, do.....	.....	850	51,768	51,768
Tallow, bbls.....	.....	302,760	460,800	763,560 bbls.
Grease, do.....	.....	.....	740,600	740,600
Horses, No.....	118,000	.....	118,000 No.	118,000 No.
Hogs, No.....	5,400	.....	7,400	7,400
Sheep, No.....	341,505	.....	341,505	341,505
Wool, lbs.....	290,657	.....	290,657	290,657
Coal, bushels.....	4,333,000	1,321,397	919,376	7,573,762
Tobacco, hbls.....	5,604,000	5,604,000	3,800,000	8,700,000 bush.
Eggs, bbls.....	90,345,000	750,000	205,000	90,900,000
	.....	17,000	.....	18,000 bbls.

In this table, we find, that of flour, pork, lard, butter, cheese, wool, and tobacco, the railroads carried off *more than the River and Lakes together*. This is entirely reversing the whole of the old mode of transportation. The effect on other modes of transportation is palpable. The Ohio Canal no longer yields a revenue to the State. The Packet lines on the river are broken up, and it is plain, that the railroads are hereafter to transport the surplus produce of the West to Market. Their prosperity must mainly depend, therefore, on the increase of population, and of surplus products.

That the *surplus* products are to be increased hereafter immensely, we have no doubt. There are sources of exportation and of traffic almost wholly unproductive, which will hereafter give large and unexpected results.

Heretofore, the exports of Ohio and of the Ohio Valley generally, have been almost entirely derived from agriculture; but, in an advanced state of society, this is but one mode, in which labor produces its products. Two others, in a high state of society, become equally important, viz., Mining and Manufactures. In the Report on Statistics, it is stated that in 1858, about 8,000,000 of bushels of coal were exported from Ohio. This item did not exist in the exports of 1852. So, also, Iron is getting to be an important article of export. So, also, are various branches of manufactures, derived from metals and wood. The deposits of iron and coal, in Ohio, are sufficient to supply the whole of the United

States, and they are sufficiently accessible to river, lake and railroad, to make it perfectly certain, that a very large part of the Northwest will be supplied from these mines. The population of the States of the Valley is increasing so rapidly, that the supply for their consumption must increase rapidly. In these facts is found a strong reason to suppose, that the traffic of the Ohio Roads is to be greatly increased in the future.

To illustrate this subject, we give the following tables of *freight* carried over three Ohio Roads, viz., the Cleveland, Cincinnati and Columbus; the Central Ohio; and the Bellefontaine and Indiana.

	Cleveland and Columbus.	Central Ohio.	Bellefontaine and Indiana.
Flour, bbls.....	245,756	289,784	30,000
Wheat, bushels.....	452,278	.....	525,000
Grain,	453,879	97,723	240,500
Cattle and Horses.....	65,182	3,325	20,000
Butter.....	2,055,579	.....	.....
Cheese.....	7,318,923	.....	.....
Pork and Lard, bbls.....	82,305	17,533	.....
Hogs and Sheep.....	222,796	116,263	40,000
Hogs, dead.....	8, 50	.....	.....
Tobacco, hhd.....	1,550	9,300	.....
Whisky and Alcohol.....	.....	55,169 bbls.	.....
Wool, lbs.....	2,286,603	503,107	.....

These roads all pass through the central portions of Ohio, and the amount of freight carried off, from the land, is enormous. The aggregate of these articles on these three roads, is as follows:

Flour, bbls.....	565,330
Wheat, bushels.....	977,278
Grain,	792,102
Cattle and horses.....	88,507
Hogs and Sheep, No.....	378,059
dead.....	8,050
Whisky, bbls.....	55,169
Butter, lbs.....	2,055,579
Cheese, lbs.....	7,318,923
Wool, lbs.....	2,789,710
Tobacco, hhd.....	10,850

Ten years ago no part of this was carried by railroads, and we shall hazard nothing in saying, that ten years hence the quantity transported in this way will be doubled.

In the progress of wealth and population, it is impossible that the natural resources of the country should not be developed. Very soon the mines of iron and coal will yield immense quantities of surplus mineral to be carried off in the same way. If the roads are prudent and economical, they will in time reap the harvest.

SUGAR CROP OF LOUISIANA.—Mr. Champoiniers' Report of the Sugar Crop of Louisiana, for the present year, shows the entire product to be 365,000 hhd.

The crop each year, the last ten years, was as follows:

	Hhds.
Crop of 1849.....	247,923
Crop of 1850.....	211,201
Crop of 1851.....	236,547
Crop of 1852.....	321,624
Crop of 1853.....	449,324
Crop of 1854.....	349,635
Crop of 1855.....	231,428
Crop of 1856.....	73,976
Crop of 1857.....	297,697
Crop of 1858.....	365,000

From the above, it will be seen that the crop of 1858 is the largest one made during the ten years, except that for the year 1853.

BREVITIES.

The New York Central Railroad has been put in capital order for the summer campaign, which, from present appearances, is likely to be quite lively. See time table in another column.

—The building of the Houston Central R. R. has been contracted for with Mr. Henry P. Adams, of New York. Fifty miles are to be completed by the 1st of June, 1850.

—A tubular bridge has just been completed over Twelve Mile Creek, for the Great Western R. R., of Canada. The cost of the structure was \$60,000.

—We understand that it is the expectation of the Directors of the Cleveland and Chattanooga railroad, Tenn., to run trains through by the 20th of May.

—The New York Central advertises to make the run between New York and Cincinnati in twenty-nine hours.

—A cotemporary, in speaking of the Baltimore and Ohio R. R., says:

We know from recent observation that it keeps pace with all the improvements that conduce to safety and comfort. Its track is smooth and ballasted with broken rock, avoiding thereby the annoyance of dust caused by a sand or gravel bed. It has its own exclusive double telegraph line, which the experience of the railroad system has proved to be its safety-valve, the preventive of accidents. It has also adopted for all its night trains sleeping-cars of the most approved style.

SPRING AND SUMMER ARRANGEMENTS FOR WESTERN AND SOUTHERN TRAVEL.—The New Jersey and Camden and Amboy Railroads have united with the Pennsylvania Central and Baltimore and Ohio Railroads, in their free competition for Western travel with the New York Central and the New York and Erie roads. Unusually fast time is adopted for the Express Mail trains, which leave New York, via Jersey City, at 7 A. M. and 6 P. M., commencing the 11th instant. By this route, the time taken is 30 hours from New York to Cincinnati, 36 to Chicago, and 46 hours to St. Louis—one hour sooner than by either of the New York routes.

The Express Mail line for Washington, New Orleans, and the Atlantic and Southwestern cities, is changed from 8 A. M. to 7 A. M., and with the 6 P. M., from Cortlandt street, New York, form the great Southern lines. The 7 A. M. makes the departure of the mails and Southern passengers one hour earlier than heretofore, and secures their arrival in Washington and the cities South at a like advance.

From Washington for New York, there will be two daily trains. One leaving at an early hour, connecting with the 11 A. M. from Philadelphia, and connecting in New York at about 3 P. M.; and the other arriving with the 3.30 P. M. from Philadelphia, and arriving at New York about 8 P. M.—Both via Newark.—*Balt. American of Monday.*

MOBILE AND OHIO RAILROAD.

The Eleventh Annual Report of the President of this Company to the stockholders is dated February 21st, and opens with congratulations on having passed through the late financial "crisis," without serious losses to the Company. It appears that the Company had pressing liabilities—

To the State of Alabama.....	\$300,000
For Rails, Fastenings, etc.,.....	137,591
Various parties in London.....	849,443

all of which have been arranged on terms highly favorable to the company.

The settlement of the several liabilities above referred to, and others not material to be stated in detail, put the Company in condition to enter the market for the purchase of rails and fastenings with reasonable certainty of success.

On the 29th of July, 1858, two contracts were entered into with Mr. Crawshaw, of London. The one for rails necessary to finish the entire trunk of the road, the other for rails enough to complete the Columbus, Mississippi, branch, amounting in all to seventeen thousand two hundred tons. At the same time another contract was entered into with the Ebbwvale Co., of London, for the necessary amount of *fishing bars, bolts and nuts*. These purchases were made payable, one-half in our Sterling Mortgage Bonds, and the other half in cash, or at our option, in London acceptances at six months' time from each shipment, bearing five per cent. interest.

The confidence inspired by the funding of our debts on favorable terms, and the further sale of the company's bonds in the purchase of iron, enabled us to provide the London acceptances necessary to secure and close these contracts.

This being done, another movement became important to sustain the credit and confidence raised by these successful steps in our progress toward the completion of the Road. It was necessary to raise the money to meet the cash part of our purchases. To aid in this, loans on one year's time were obtained to the extent of one hundred and ten thousand dollars. And, by order of the Board, a sale of our Sterling Mortgage Bonds was authorized, at eighty per cent. on their par value. Two hundred and fifty thousand dollars of these Bonds were promptly taken by the citizens of Mobile, and thirty-two thousand dollars by the citizens of Columbus, Mississippi. The proceeds of the loans and sales of Bonds at Mobile is to be applied in payment of the cash part of the purchase of iron, and the freight on the same, for the trunk line of the road. The amount received and to be received at Columbus, Mississippi, is to be applied exclusively in the completion of the Branch Road to that place.

By these sales of Bonds and the loans referred to, we have provided three hundred and thirty-five thousand six hundred dollars to

meet the cash part of our purchases of rails and fastenings. One hundred and forty-seven thousand dollars of this has already gone to London, which is quite in advance of the obligations of the contract.

The amount of cash means already raised, with the aid of the Tennessee fund applicable to the part of the Road lying in that State, will enable us to pay the foreign cost of all our iron, including the ocean freights and insurance. *The iron for the whole road, including the Columbus, Mississippi, Branch is, therefore, perfectly secure.*

And now another step has to be taken. We have the means to secure the iron contracts, and pay the foreign cost, including freights and insurances, but we have not the means at command to pay the duties, finish the road and lay the rails in the track.

It has been the policy of the present Directory to create no new debts until means of payment are provided. It has also been their policy to get back, as fast as possible, the Bonds of the Company which had been pledged as collaterals to secure floating liabilities. Two million one hundred and eighteen thousand dollars of these Bonds have been released from hypothecation and delivered up to the Company during the year.

The floating debt of the Company has been reduced one million one hundred and fifty-five thousand five hundred and sixty-two dollars and fifty-one cents. In the remaining floating debt is included fifty thousand dollars borrowed and paid over on the recent iron purchase. The funded debt has increased one million six hundred and fifty-two thousand six hundred dollars. This increase has been by funding the following items and amounts, nearly all of which had their origin in previous years, viz:

Expended in Tennessee.....	\$318,000
Settlement with Dellinger.....	12,000
Taking up endorsements at Mobile.....	306,660
London Iron debts.....	980,000
Moran Brothers.....	30,000
Total.....	\$1,652,660

At the commencement of the year we could only control \$681,000 of our Sterling Mortgage Bonds. We now have on hand (including those set apart on account of the recent contracts in London) one million seven hundred and thirteen thousand dollars, (\$1,713,000.) After deducting the amount necessary to complete the purchases of rails and fastenings, we still have an ample amount, in connection with the Tennessee fund to complete and equip the entire road, including the Columbus, Miss., branch.

Sixty-eight miles of track have been laid down during the year, and eighty-seven at the north end of the road put in running order. This part of the road has been in operation so short a time, that no reliable facts showing its earning power have been developed.

The Mobile end of the road continues to more than meet the highest estimates of its earning capacity. In December last an ex-

hibit of the condition of the road and its income was published, in which the following statements were made:

"It is a remarkable fact that the actual income of the Mobile and Ohio Railroad has fully equalled the estimates made of its probable earnings when the enterprise was first brought before the public.

"Two hundred and thirty-two miles of the south end of the road are in operation. This portion of the road, including machine shops, rolling stock and equipments of every kind, cost \$4,895,349. The net earnings of this part of the road, (estimating December at the income of November,) will be three hundred and eighty thousand dollars (\$380,000) for the present year. This, it will be seen, is over seven and a half (7½) per cent. on the entire cost of this part of the road, including rolling stock, machine shops and equipments of every kind. This is before the road has any through connections."

The net earnings per mile in 1857 was \$1,389 42; in 1858, \$1,746 00, showing an increase of net earnings per mile of nearly twenty-six per cent.

Gratifying information has been received in regard to the prospects of an early completion of the Paducah Branch. The city of Paducah has voted a tax for this purpose of \$150,000, and by a letter from Judge Campbell, the President, we learn the means are provided to make the road as far as the Tennessee line. The part in Tennessee (only thirteen miles) will doubtless soon be made. It will be to the interest of the Mobile and Ohio Railroad Company to give all the assistance in their power to push this important work through.

Receipts and Expenditures of the Mobile and Ohio Railroad Company, from its organization to December 31st, 1858, inclusive.

RECEIPTS.			
	To Dec. 31st, 1857.	Received in 1858.	Total to Dec. 31st, 1858.
CAPITAL STOCK—			
Mobile instalments.....	\$308,548 83	16 25	308,565 08
Miss. instalments.....	1,114,154 72	88,600 12	1,202,814 84
Tenn. instalments.....	184,317 73		
Requisition for work done in Tenn., Paid by Stock.....	334,137 09	103,775 04	622,229 86
Ky. instalments.....		105,081 84	105,081 84
City Tax, 1850.....	20,316 80		20,316 80
City Tax, 1851.....	25,896 79		25,896 79
City Tax, 1852.....	161,233 92*		161,201 92
City Tax, 1853.....	215,174 43	231 31	215,405 74
City Tax, 1854.....	222,783 70	787 74	223,571 44
City Tax, 1855.....	221,233 57	2,034 14	223,267 71
City Tax, 1856.....	202,854 66	19,971 56	216,826 22
State of Mississippi Subscription.....	100,000 00		100,000 00
Sundry subscrip'ns.....	13,274 72	2,200 00	16,074 72
Total on acct of Capital Stock.....	3,123,926 96	317,926 00	3,441,852 96
BONDS AND STATE LOANS—			
City Tax Bonds.....	400,000 00		400,000 00
Tenn. State Bonds.....	436,000 00	238,660 72	674,660 72
Ala. State Loan.....	369,410 37		369,410 37
Income Bonds, '61.....	757,815 00	1,600 00	759,415 00
Income Bonds, '62.....	334,283 00	20,440 00	354,723 00
Income Bonds, '65.....	132,000 00	243,132 00	375,132 00
Income Bonds, '67.....		18,700 00	18,700 00
Sterling Bonds, '83.....	34,000 00	844,034 86	878,034 86
Miss. State Loan.....	135,000 00	65,970 83	200,970 82
Total from Bonds and State Loans.....	2,618,508 37	1,432,738 40	4,051,246 77
LANDS SOLD—			
Station Grounds.....		568 00	568 00
Lots at Mauvila.....	4,364 84	50 00	4,314 84

* Thirty-two dollars refunded, having been paid twice on same property.

Lots at Citronelle.....	10,078 83	27 50	10,106 33
Lots at Scooba.....		300 00	300 00
Lots at Whistler.....	33 33	216 00	249 33
Donated Lands.....	13,679 70†	61,910 65	75,590 35
Total from Sales of Lands.....	28,056 70	63,072 15	91,128 85
TRANSPORTATION—			
Gross Receipts.....	1,374,999 31	711,998 03	2,086,997 34
MILL MACHINERY—			
Sold.....	14 030 47	3,500 00	14,530 47
SUSPENSE ACCOUNT.	3,183 38	75 00	3,258 38
	7,159,705 19	2,529,369 58	9,689,074 77
BILLS PAYABLE—			
Balance Unpaid.....			547,823 67
REQUISITIONS—NORTHERN DIVISION—			
Outstanding.....			70,372 99
INDIVIDUAL BALANCES—			
For Cars, Contracts, Iron, etc.,.....			7,954 20
LOCAL BALANCES..			100,395 91
			726,546 77
Total.....			\$10,415,561 54

EXPENDITURES.			
	To Dec. 31st, 1857.	Expended in 1858.	Total to Dec. 31st, 1858.
CONSTRUCTION—			
Graduation, Masonry, Bridges, etc.....	2,621,952 15	315,587 47	2,937,539 62
Superstructure.....	32,532 31	96,9 3 31	429,745 62
Ballasting.....		2,786 71	2,786 71
Rails & Fastenings.....	1,991,132 57	135,871 11	2,127,003 68
Tenn. Rails.....	422,493 24	135,837 90	558,331 14
Rails & Fastenings, Contracts for 1858.....		70,556 50	70,556 50
Station Buildings.....	62,478 01	6,091 40	67,569 41
Water Fixtures.....	24,936 92	1,237 58	26,174 40
Repair of Shops.....	49,282 43	5,102 15	54,384 58
	5,505,107 63	708,984 03	6,274,091 66
ENGINEER'S DEPARTMENT—			
Surveys and Locations.....	56,227 48		56,227 48
Construction.....	280,171 91	31,649 89	311,821 80
REAL ESTATE—			
Road Purposes.....	16,753 07		16,753 07
Station Grounds.....	31,818 97	1,920 00	33,038 97
EXPENSES—			
General Office, Salaries, etc.....	111,617 29	9,815 91	121,433 20
Com's and Agencies.....	84,169 04	58,755 26	142,924 30
MACHINERY—			
Rolling Stock.....	578,342 57	95,018 53	603,361 10
Rolling Stock for Tennessee.....	870 33	77,627 28	78,497 61
Mills for Sawing.....	13,302 30		13,302 30
RIGHT OF WAY.....	14,183 69	2,917 94	17,101 63
DONATED LANDS—			
Exp's, Surveys, etc.....	13,679 70	2,123 68	15,803 38
			1,404,464 84
INTEREST ON—			
City Bonds, '56-7.....	119,222 64	123 32	119,355 96
State Loan.....	86,077 20	147 93	86,225 13
Sterling Bonds.....	5,854 19	35,277 21	41,131 40
Foreign Iron Debt.....	166,502 13	35,962 66	202,464 79
Income Bonds, '61.....	109,876 80	67,363 58	177,240 38
Income Bonds, '62.....	13,790 00	35,123 20	48,913 20
Income Bonds, '65.....	4,900 00	44,152 00	49,052 00
Tenn. State Bonds.....	36,590 40	38,330 00	74,920 40
Miss. State Loans.....	2,831 11	12,088 74	14,939 85
General Account.....	128,578 32	61,036 80	199,615 12
	684,172 79	319,615 44	1,013,788 23
PADUCAH BRANCH—			
Superstructure.....	114,894 08		114,894 08
TRANSPORTATION—			
Exp's, Trains, etc.....	686,542 02	354,529 08	1,041,071 10
CITY TAX BONDS—			
1-56-'57—Paid off.....	400,000 00		400,000 00
ALA. STATE LOANS—			
Paid off.....	100,000 00		100,000 00
MATERIALS FOR WHISTLER—			
For Repairs, etc.,.....	13,614 38*		8,811 28
SUSPENSE ACCOUNT.	3,093 38		3,093 38
CITY TAX SCRIP.....	658 35		658 35
	8,709,208 98	1,657,453 93	10,366,672 92
Reduction of Bills Payable.....		798,888 22	
Reduction of Individual Balances.....		49,821 51	
		2,506,162 67	
Cash Balance.....			48,888 62
			\$10,415,561 54

At an election by the stockholders, held February 24th, 1859, the following named

† Invested in Sterling Bonds, canceled. Stock on hand reduced by \$4,803 10

gentlemen were elected Directors of the Company for the current year:

Wm. Cook, of Kentucky; Milton Brown, of Tennessee; James Whitfield, Eli Abbot, J. J. McRae, Dr. J. J. Cunningham, of Mississippi; Wm. Jones, Jr., J. Emanuel, D. W. Goodman, J. C. Rupert, M. H. Bloodgood, C. P. Gage, of Mobile; F. S. Lyon, of Alabama.

CINCINNATI & INDIANAPOLIS R. R.

We have a copy of the Annual Report of the Cincinnati and Indianapolis Road, which exhibits a financial condition and results of the year's business much more favorable than most of the Western roads. The receipts of the road on account of transportation, for the year ending December 31, were as follows:

On account of Passengers.....	\$172,837 65
On account of Freight.....	259,724 87
On account of Mail and Express.....	16,822 48
Total receipts.....	\$448,885 00

The ordinary expenses of transportation for the same period were \$218,023 79, or about 48 per cent. But for the floods of April, May and June, which greatly interrupted the business and travel of the country, our receipts would have been twenty per cent. more during that quarter, and the expenses in the department of "Road Repairs," \$5,000 less. The amount of interest and taxes charged to receipts is \$98,368 73; deducting which from the balance net earnings—\$230,861 21—leaves \$132,492 48, or about eight per cent. upon the capital stock.

The statistics of local freight for the years 1857 and 1858, show an increase for the latter year in local tonnage of 17,749 tons, and in the receipts from this traffic of \$31,734 16. The result is encouraging, especially in view of the fact that the past year has been one of general depression in all branches of trade. The report says:

In the month of July, there matured \$15,500 of the Domestic ten per cent. Bonds of the Company, of which \$13,000 were paid from current receipts. The remaining \$3,500 have not yet been presented for payment. On the 12th of December, the Real Estate Bonds, amounting to \$200,000 and bearing ten per cent. interest, also fell due. It was proposed to the holders of these bonds to exchange them at their par value for the seven per cent. bonds of the Company, entitled the "mortgage bonds of 1858," at the rate of 85 cents on the dollar, the Company paying the difference of fifteen per cent. in cash, and stipulating to appropriate the proceeds of the real estate of the Company, not wanted for right of way or depot purposes, to the redemption of the bonds at the same rate.

This proposition was at once accepted by a very large proportion of the bondholders, and about \$170,000 have already been exchanged. It is not expected that the Company will be called upon to pay more than \$10,000 or \$12,000 of the bonds in question. It is, however, assumed in the "General Account" hereto appended that the Real Estate Bonds are all exchanged; but should any of them be paid in cash, the item of "Mortgage Bonds of 1858" will be to that extent reduced, and the item of "Bills Payable" increased.

The "Mortgage Bonds of 1858" are the same as were referred to in my former report as the "Mortgage Bonds of 1857." It was deemed advisable to postpone the issue for

one year. The whole issue provided for is \$1,600,000, to mature in thirty years from October 1, 1858, and is intended to absorb the whole outstanding indebtedness of the Company. A sufficient amount is pledged to the redemption of the funded debt. They will then stand as first mortgage bonds. After thus providing for the Real Estate Bonds, it was deemed expedient to make an effort to fund the floating debt of the Company, as charged in the general account of the Treasurer, by a sale of the bonds in question at not less than eighty cents on the dollar, free of commission. For this purpose \$150,000 of the bonds have been subscribed since the first of January. The Board of Directors having, by these negotiations, provided for the maturing funded obligations of the Company, and for the great proportion of its unfunded debt, will have no hesitation in resuming the payment of cash dividends, and have confidence that they will not again be postponed.

The amount of bonds and construction debt paid from the net earnings of the road during the past two years exceeds \$200,000, and to this extent the value of the capital stock has been enhanced.

The receipts of the road for the current year will depend entirely upon the next harvest.

It would be idle to expect any large increase of traffic during the first half of the year. The freight is not in the country. With an average harvest, I have entire confidence that the earnings for the year will show a gain of 15 per cent. on the past twelve months.

The surplus account now stands \$250,010.

GENERAL ACCOUNT.

LIABILITIES.	
Capital.....	\$1,689,900 50
First Mort. Bonds, 7 per cent.....	\$500,000 00
Second Mort. Bonds, 7 per cent.....	400,000 00
Mortgage Bonds, 7 per cent.....	200,000 00
Dividend and Interest 7 per cent.....	66,283 98
Income, Special and Domestic 10 per cent.....	176,000 00
Bills Payable.....	1,362,683 98
Unclaimed Dividends.....	148,762 07
Interest Fund.....	4 08 15
Surplus Fund.....	15,223 83
Total.....	250,010 71
Total.....	\$3,470,262 29
ASSETS.	
Construction.....	\$2,383,320 09
Equipment.....	533,629 62
Third Rail.....	114,631 77
Telegraph.....	6,413 3
Union Railway.....	25,689 13
Real Estate Account.....	\$3,063,683 92
Bills Receivable.....	241,164 84
Due from other Roads and Individuals.....	94,429 28
Materials and Stores on hand.....	18,029 32
Fuel on hand.....	24,526 91
Cash.....	16,294 14
Total.....	12,153 88
Total.....	\$3,470,262 29

The floating debt in the above statement has since been all funded.

STATE DEBTS IN EUROPE.—The debts of different nations and States are estimated, in the European States, at more than ninety-nine hundred and eighty millions of dollars—\$9,980,873,768. The most deeply indebted nations are:—Great Britain, \$3,876,563,470; France, \$1,606,388,493; Austria, \$1,209,420,000; Russia, \$1,041,414,123; Spain, \$732,205,548; Holland, \$450,395,337; and Prussia, Portugal, Sardinia, Belgium, and Denmark, severally, owe more than one hundred millions. The Central and South American States owe \$308,696,014, of which Mexico is set down for \$133,526,242; Brazil, \$73,277,250; Peru, \$46,451,387; Venezuela, \$22,865,620; and the others various sums, from one quarter of a million to fifteen millions of dollars.—*Hunt's Merchants' Mag.*

N. E. & S. W. ALABAMA R. R.

The annual report of the officers of this company has been received, from which we gather the following information:

The line of the Company as projected, extends from Chattanooga, Tennessee, to Meridian in Western Alabama, and will be, when completed, about 294 miles in length.—The heavy work on the 100 miles of the first Division, between Meridian and Tuscaloosa, was let to contract in 1856, to be completed in the fall of 1859. The light work, it was determined very properly, was not to be let out until a later period, when it was believed generally it could be let out on terms of half cash and half stock. Efforts were made the early part of the year to let out the work on these terms, but without success. In the fall, the whole of the light work, sufficient to complete 74 miles of the division the present year, was let out principally for cash. The contractors have, with a few exceptions, pushed their work so vigorously as to warrant the belief that they will be through in the time specified in their contracts, and there is no reason to doubt that all of them will finish their work by the required time. It may be said that the road-bed, so far as the grading is concerned, will be ready for the iron by the fall of 1859, entirely to Tuscaloosa.

The Chief Engineer, in referring to the plan of bridge has been adopted for both the Black Warrior and Tombigbee bridges, and arrangements have been made for having the bridges framed and put up under the immediate supervision of an agent of the patentee. This plan of bridge has been so thoroughly tested, as to leave no doubt on my mind that it is for our purposes and generally, the best plan of wooden bridge now in use."

The entire amount of earth-work and culverting done and to be done from Meridian to Tuscaloosa, is..... \$576,280

Of which there has been executed as follows:

Paid for in stock..... \$155,122
In cash..... 105,010— 260,132

Leaving to be done in earth-work and culverting.. \$316,148

The company have employed an experienced geologist to examine the iron ores on their lands, with the ultimate view of manufacturing the rails for their road, he says:

From the best information I can get, English railroad iron is worth at this date in Mobile, per ton..... \$52 30
To put it on your road the freight would be..... 3 50

Cost of English rails on your road at this date..... \$56 00
A month hence it will cost more in the estimation of those in the trade. Cost of rails made at your works, as per foregoing estimate..... 41 80

Actual saving, if you make your own iron, per ton..... \$14 20
To this should be added, for difference in the quality of English and American iron..... 10 09

\$24 20

Showing difference in favor of manufacturing your own iron, of twenty four 20-100 dollars per ton, which upon the quantity, 25,000 tons, required to clothe your entire road, would make a saving of \$605,000—a sum equal to that called for to prepare your road-bed for iron. Should you purchase the pig iron and pay the smelters a profit, say \$6 1-2 per ton, on metal, making about \$8 per ton on the rails, this difference would be reduced to the sum of \$405,000.

The following officers were elected at the meeting held 16th December:

James A. Mudd, Alfred Battie, A. B. Dearing, Jas. H. Dearing, R. P. Frierson, James Jack, Jas. I. Thornton, Sam'l L. Creswell, Sol. McAlpine, A. F. Alexander, Jas. Hair, R. F. Houston. The new Directors subsequently

met and appointed the following named gentlemen as officers: *President*, Nelson L. Whitfield, Tuscaloosa, Ala.; *Chief Engineer*, R. E. Rhodes, Eutaw, Ala.; *Treasurer*, Henry A. Snow; *Secretary*, Wm. S. Foster; *Executive Committee*, Alfred Battie, Capt. Jas. H. Dearing, and A. B. Dearing.

TABLE OF DISTANCES.

For the benefit of travelers, we give the following table of distances between the stations on the Overland Mail Route from San Francisco to St. Louis, *via* Arizona:

San Francisco to Clark's 12, Sun Water 9; Redwood City 9, Mountain View 12, San Jose 11, Seventeen Mile House 17, Gilroy 13, Pacheco Pass 18, St. Louis Rancho 17, Lone Willow 18, Temple Rancho 13, Firebaugh's Ferry 15, Fresno City 19, Elk Horn Spring 22, Whitmore's Ferry 17, Cross Creek 12, Visalia 12, Packwood 12, Tule River 14, Fountain Spring 14, Mountain House 12, Posey Creek 16, Gordon's Ferry 10, Kern River Slough 12, Sink of Tejon 14, Fort Tejon 15, Reed's 8, French John's 14, Widow Smith's 24, King's 10, Hart's 12, San Fernando Mission 8, Canuengo 12, Los Angeles 12, Total 462 miles; time 80 hours.

Los Angeles to Monte 13, San Jose 12, Rancho del Chino 12, Temascal 20, Laguna Grande 10, Temecula 21, Tejungo 14, Oak Grove 12, Warner's Rancho 10, San Felipe 10, Vallecito 18, Palm Spring 9, Carriso Creek 9, Indian Wells (without water) 32, Alamo Mucho (without water) Cook's Wells (without water) 22, Pilot Knob 18, Fort Yuma 10. Total, 282 miles; time, 72 hours and 20 minutes.

Fort Yuma to Swiveler's 20, Fillibuster Camp 18, Peterman's 19, Griswell's 12, Flap Jack Rancho 15, Oatman Flat 20, Murderer's Grave 20, Gila Rancho 17, Maricopa Wells 40, Socaton 22, Picachio 37, Pointer Mountain 22, Tucson 18. Total 280 miles; time, 71 hours 45 minutes.

Tucson to the Cienega 35, San Pedro (without water) 25, Dragoon Springs, (without water) 23, Apache Pass (without water) 40, Steen's Peak (without water) 35, Soldier's Farewell (without water) 42, Ojo de Vaca 14, Mimbres River 16, Cook's Spring 18, Piachio (without water) 52, Fort Fillmore 14, Cottonwoods 25, Franklin 22. Total 300 miles; time 82 hours.

Franklin to Waco Tanks 30, Canodrus 36, Pinery (without water) 56, Delaware Springs 24, Pope's Camp 14, Emigrant Crossing 65, Horsehead Crossing 55, Head of Concho (without water) 70, Grape Creek 22, Fort Chadbourne 30. Total 428 miles; time, 128 hours 40 minutes.

Fort Chadbourne to Station No. 1, 12, Mountain Pass 16, Phantom Hill 30, Smith's 12, Clear Fork 26, Francis's 13, Fort Belknap 22, Murphy's 16, Jackboro 19, Earhart's 16, Conolly's 16, Davidson's 24, Gainesville 17, Diamond's 15, Sherman's 15, Colbert's Ferry (Red River) 13½. Total 282½ miles; time 65 hours 25 minutes.

Colbert's to Fisher's 13, Walis 14, Boggy Depot 17, Gary's 17, Waddell's 15, Blackburn's 16, Pusley's 17, Riddell's 17, Holloway's 17, Trayton's 17, Walker's 17, Fort Smith 15. Total 192 miles; time, 28 hours.

Fort Smith to Woolsey's 16, Brodie's 12, Park's 20, Fayetteville 14, —'s Station 12, Callahan's 22, Harburn's 10, Couch's 16, Smith's 15, Ashmore 20, Springfield 13, Evans's 9½, Smith's 11, Bollivar 11, Yost's 16, Bailey's 10, Warsaw 11, Burns's 10, Mulhol-

land's 20, Shackelford's 13, Tipton 7. Total, 318½ miles; time, 48 hours 55 minutes.

Tipton to St. Louis, 160 miles; time, 11 hours and 40 minutes.

RECAPITULATION.

From San Francisco to Los Angeles.....	462 miles.
Los Angeles to Fort Yuma.....	32½ "
Fort Yuma to Tucson.....	320 "
Tucson to Franklin (El Paso).....	360 "
Franklin to Fort Chadbourne.....	428 "
Fort Chadbourne to Red River.....	38½ "
Red River to Fort Smith.....	192 "
Fort Smith to Tipton.....	198½ "
Tipton to St. Louis.....	160 "

Total.....2,766 "

Total time, 25 days. Time from Tubac to San Francisco, 11 days; to St. Louis, 16 days. —*Arizonian*.

THE PACIFIC RAILROAD.

The two great Anglo Saxon nations, England and the United States, are contending now peacefully for a prize, of more importance to them respectively than any that was ever gained on the tented field. They are contending for the trade of the Pacific, and the nation that succeeds in winning it will have attained a triumph, the results of which will baffle all attempts at an estimate. It is not alone upon the Central American Isthmus that this question is to be decided. Over the continent of America the rails are to be laid that will connect the ports of the Pacific with those of the Atlantic. Our government was first in the field with its several corps of engineer officers, surveying the most appropriate route for this great national work, and Congress has been engaged during the present session in endeavoring to mature a plan for carrying out the enterprise. Three routes are proposed for the road—a Southern one, crossing New Mexico at El Paso or Albuquerque; a central one, crossing the Rocky Mountains at the South Pass; and a Northern one, starting from the head of Lake Superior, and crossing Oregon to the Pacific. The probability is that one road only will be authorized by some future Congress, and that the selection of that road will be left to the Executive—if the road is to be built by the government—or to the contractors, if that mode of building it shall be preferred. The estimated cost of one road is a hundred millions of dollars, but we think that a hundred and fifty millions would be much nearer the mark. If the three roads are to be built, the aggregate cost to the government will not fall short of five hundred millions of dollars.

In the meantime and while rival interests are contending in and out of Congress over the location of the road and the mode of building it, the British government has gone to work and sent out parties of engineers to survey a route from Lake Superior, through its own territories to the Pacific. This road would open the fertile valleys of Saskatchewan and Red River of the North, make available the gold mining regions of Frazer River, and divert the trade of the Pacific through the lakes to Quebec. Thus there are in contemplation, four routes to the Pacific over the continent, the average cost of which can not be less than one hundred and fifty millions of dollars, or six hundred millions for the whole. —*Weekly Arizonian*.

QUICK TIME.—It is said that the time from Cincinnati to New York, *via* Pittsburg and Philadelphia, by the new time tables, which took effect on Monday last, is to be reduced to thirty hours.

MEXICO—ITS WEALTH, SOIL, CITIZENS, POPULATION, ETC.

Some time since Senor Tojada published a series of articles upon the condition of Mexico, giving a very good idea of its natural wealth, the quality of its soil, the richness of its mines, the size of its cities, etc. It has command of a large ocean front, with numerous gulfs, bays and inlets, many of which furnish excellent harbors. There are some twelve or fifteen rivers, the longest of which is the Rio Bravo del Norte, all of which are navigable to a certain distance; in most cases, however, very short. A good many of these and of the lesser streams of the country would furnish an abundance of water-power which now runs to waste. The more southerly portions of the country are almost uniformly fertile. Sterility is impressed chiefly on the northern plains and the mountainous regions. A great deal of the finest soil of Mexico is yet unreclaimed. It abounds in the most valuable timber trees, and a growth which affords rich dyer and many of the prized gums of commerce and medicinal extracts. Of its mineral wealth, not a word need be said. There is scarcely a known metal which is not found in its mines.

Table of the Capital Cities of each State and Territory, the number of Inhabitants of each, and the Distance from the City of Mexico.

	No. of Inhabitants.	Dist. from Mexico.
Aguas Calientes.....	39,699	140
San Cristobal.....	7,649	269
Chihuahua.....	12,004	333
Saltillo [a] Leona Vicaria.....	8,105	209
Durango.....	14,000	263
Guanajuato.....	36,921	94
Tixtia (Ciudad Cuernavaca).....	6,501	70
Guadalajara.....	68,000	161
Toluca.....	12,000	16
Morelia.....	22,600	69
Monterrey.....	17,999	234
Oajaca.....	25,000	108
Puebla.....	70,000	28
Queretaro.....	27,456	57
San Luis Potosi.....	19,678	114
Cohacan.....	9,646	403
Ures.....	6,000	582
San Juan Baptista.....	5,500	239
Ciudad Victoria.....	4,621	195
Vera Cruz.....	9,647	93
Merida.....	22,575	286
Zacatecas.....	15,427	130
Mexico.....	183,000	..
Tlaxcala.....	3,463	28
Colima.....	31,774	172
La Paz.....	1,254	416
Minatitlan.....	339	168
Villa del Carmen.....	3,668	309
San Luis de la Paz.....	4,411	95

Total no. of inhabitants.....690,044

There were, at the latest examination of the departments, but 9,234 foreigners residing in the country, of which there were 5,141 old Spaniards, 2,048 Frenchmen, 615 Englishmen, 581 Germans, 444 Americans, and of other nations 405.

The agricultural wealth is estimated at \$260,000,000, and the yield of the mines at \$24,000,000 annually. The value of domestic manufactures is set down at \$90,000,000. There are forty-six cotton and eight woolen manufactories, located chiefly in the middle States of the Republic. About forty thousand pounds of silk are made in silkeries at the capital, and in Pueblo and Guadalajara.

Money lending, especially in the capital, is done extensively, about ten millions of capital being employed in the business.

It is not known now, such is the anarchy which prevails, what the present annual revenue is, but in 1854 it was \$15,000,000. The annual expenditure is about \$25,000,000. The national debt is about \$120,000,000. In 1855, the army was composed of 11,700 men, and

of this number there were no less than 5,800 officers.

The property of the church is supposed to be between two hundred and fifty and three hundred millions of dollars. At the capital, the clergy own more than half the buildings, and the whole are valued at \$80,000,000. Adding the rents of landed property to all other sources, and his estimate is that the total income of the church, annually, is \$80,000,000.

STEAM UPON CANALS.

With the opening of Spring has come an active interest in the subject of navigating canals by boats driven by steam. A timid policy for twenty-six years has kept back the employment of this agent where now it will produce great results, particularly in the transportation of bulky and metallic freights. As long ago as 1833, an experimenter placed an impeller upon the Northampton Canal, and proceeded from Springfield to Northampton at a good speed, boring the course through the water by the auger-like instrument revolving in front of the boat. The progress made was completely satisfactory, but the washing of the banks of the canal was offered as an objection to the introduction of the plan, and thus, down to last year, has this baseless opposition been allowed to operate, till canal stock in various parts of the country sadly depreciated in value. For two years past, however, in Scotland, upon the Ardrossan Canal, the ordinary speed for conveying passengers by steamboat has been nine or ten miles an hour, and though fourteen journeys daily were made, yet the banks of the canal sustained no injury. This fact, with other considerations, has operated to introduce the experiments made last year upon the canals in New York State, while an additional stimulus has been given to activity in this direction by the startling results made in the Canadian canals, by which vessels of ten feet draught are taken from Fond du Lac, on Lake Superior, to the Gulf of St. Lawrence, a distance of twenty-two hundred miles. When we reflect that in 1856 the steam tonnage entered and cleared at the eight principal Lake ports, amounted to nearly a million and a half, we gain some idea of the enormous trade in that region, which amounts to more than double of the whole foreign commerce of the country, or to seven hundred millions of dollars! Canada has perceived the importance of this commercial greatness, and consequently has completed five canals, the aggregate length of which is not seventy miles, to draw off some of the profit from those interested in American canals.

We do not propose to present all the facts connected with this interesting subject, but we desire to awake the attention of the public to the importance of adopting steam power upon canals as the best thing that can be done for all interests. Pennsylvania owes it to herself to be as active as New York if she would not run behind that State in the realizations of wealth and prosperity which are ever graduated by the speed of distribution. Narrow, selfish views, which are always incorrect both in subjects connected with public economy as well as in those of personal aggrandizement, should not be permitted to interfere with the turning to the best account our canal property. If it be thought that railroad stock may be injured by following the example set by New York, let us remember that this consideration has been entirely overruled there, for it has been ascertained

that there is a vast deal of bulky merchandise which can not be sent by railroad either with economy to the one party or profit to the other, and which would find its way, were the swift agency of steam employed, through the canals, which can not obtain it while they are worked by slow horse power. The railroad must always have the advantage over the canals, and, as we view the whole subject, both methods of transportation must derive aid from the other. Certainly the increase in activity and speed will make all the adjustments that the most selfish fancy can deem desirable. In a word, no axiom is more clear in public economy than this, that every thing that tends to a swift distribution of money or goods increases the means of happiness in the pursuits of a people. The only terrorism in trade and commerce is sluggishness and stagnation.—*Penn. Inquirer.*

GOLD DEPRECIATION.

The effects of gold discoveries in California and in Australia have as yet not made themselves felt in the manner that was generally expected. Since prices of all other commodities as well as of silver have not relatively changed in any very great degree, gold will not now buy much less of other property than could be procured for it ten years since; and the relative price of silver remains the same, viz., standard silver in the open market of London, the financial center of the world, is per ounce 61½, and gold is £3 17s. 9d., or 933 per ounce, being as 1 to 15 the same proportion as for the previous twenty years. The theory that gold would depreciate in proportion to the other products of value, or in other words, that less flour, wheat, corn, silver, etc., would be given for an ounce of gold than formerly, seems mostly to have been based on reasoning which overlooks the proportionate annual increase of all other commodities, and the vast development of trade which could hardly take place but for new supplies of gold to act as a medium of exchange. It is no doubt the case that the discovery of the mines of America caused, after the lapse of some thirty years, a great change in the relative value of silver to gold, and of both metals to other commodities, since silver, which was as 1 to 10, gold in value rose to 1 to 15, and all prices rose considerably. But the state of affairs in the industrial and commercial world was very different then from what it is now. Machinery was hardly known, and intercourse was so limited between countries or between parts of the same country, that, as M'Cauley tells us, even in England famine prevailed in some shires, while food rotted from superabundance in others. Slavery had not ceased to exist in England. Even Queen Elizabeth enfranchised some of her slaves in Yorkshire for pay, and western Europe was not in a condition by which its debts could be much affected by prices. In France in that age, and long after, wheat or corn bread was unknown to a majority of the people. Chestnuts, mast, and similar articles were used instead, and those articles that are now considered necessities, from being thought comforts and luxuries, were then rarely known even in the latter character. The general condition of the people in other European nations was not more favorable to the influence of gold. The active traffic was of but little consequence. Hence, no matter how great was then the supply of new gold, it could have but little influence upon the production of general industry, and gold fell in value, because there was no increase production of equivalents with which

to purchase it. The metals "oozed" slowly out of Spain, affecting only certain points. In the present age the effect has been very different. The new gold discoveries found steam in full activity. Railroads and steamboats penetrate every point of the industrial world. Every branch of industry is operated more or less by steam machines. The telegraph spreads news to every industrial locality in a few hours, and a variation of the price of any commodity is known to all who can either consume or produce it, in a very short space of time. It resulted that the news of the gold discoveries and their probable effect reached every point of the commercial world almost simultaneously, and put in motion every possible element of production, in order to avail of it. The result was a production of exchange equivalent for gold in the following three years, probably exceeding that which took place in a century after the first discovery of America. This increasing production of other commodities has gone on in a greater ratio than the production of gold, which, indeed, has become stationary, since in the last six years the aggregate annual product of Australia and California has not increased. Asia has also in the same time absorbed largely of the silver which has been displaced by gold, being a far larger circle of industry with the aid of the money of Europe. The production of food and commodities is now more active than ever, and in western Europe exert all the elements of a very refined extension of the industrial arts should peace continue.

The effect which the production of gold has had upon other commodities, has also manifested itself in the case of silver, which by the increase of quicksilver has been produced cheaper. If it has not risen in proportion to gold, it has risen latterly in proportion to Asiatic produce, where it is most in demand as a medium. The failure of the silk crops of Europe caused an immense rise in demand for China silk, and silver is the medium of payment. Teas were of similar influence, and the English remittance to India for railroads, inventions, etc., requires to be in silver also. If much of their supplies were drawn from the hordes of Europe, still greater quantities here are drawn from the Mexican and South American Mines. The latest return of the Mexican mines gives the quantity of silver produced at 24,100,000 for the year 1856. The short crops of Europe were the main cause of sending large quantities of the metals to Asia; but that movement begins to react. The crops in Europe now are very abundant; food, silk, wines, and materials generally are in good supply, hence the exports of the metals cease, while they become more active internally. In the United States the quantities are large; which the demand for is likely to be considerably enhanced. In the last ten years, one hundred million of acres of new land have been taken by settlers, and 8,000,000 souls have been added to the population. Land, labor, machines, capital, and materials are all uniting in abundance to be converted into goods; and railroads, steamships, and canals, are profusely scattered over the country, to transport or exchange commodities in the most prompt and cheap manner. To activate all their industrious and interests, there is abundance of money, but as the activity of trade increases, money will require to circulate more rapidly and to improve in supply, and it may well be questioned whether the supplies of gold will do more than to meet that growing demand without doing much towards its own depreciation.—*Economist.*

JOHN T. COX, Esq.—We are gratified to learn from the communication of the President of our Railroad Company, that the new Board of Directors have re-engaged this gentleman as their Engineer. A better selection could not have been made. Mr. Cox is *au fait* in his profession, and is, besides, a high-toned, intelligent and accomplished gentleman. We congratulate him, not only upon the endorsement of his past conduct, by the company, which his re-employment indicates, but upon the flattering prospects of the enterprise, in the success of which we know he feels a deep interest.—*Free Press*.

THE TEXTILE MANUFACTURES OF ENGLAND.

It is probable that the world has never before witnessed so large an increase in industrial employments and resources, as England has displayed within the last twenty-four years, especially in textile fabrics. It is gratifying, also, that in this country we are progressing with an almost equal rapidity in a few of the incentive and operative elements, and their rich results. Still there is great room for improvement for the investment of capital and for the profitable employment of labor. In Cottons and Woolens we are active—in flax-linens we do very little—and in broad silks *nothing at all*. Why not? Surely we have skill enough, and hands enough, with a sufficient knowledge of machinery to weave sarsenets, lutstrings and poplins; and yet we do nothing of the kind! In our climate we have the power of feeding silk-worms to a prodigious extent, but we do not avail ourselves of the advantages in this respect so bountifully conferred upon us by nature—and the attempt made more than twenty years ago during the famous *multicaulis* fever, soon exploded, as if it had been a mere South Sea bubble *in petto*. In all the finer fabrics, there is in this country ample room and range enough to "weave the warp and weave the woof" by machinery as well as by the hand—yet we neglect our opportunities, or regard them with an apathy and indifference, that are alike surprising and discreditable in a people who affect to rejoice in the maxim of "go-ahead!" Much of this indolence or perverseness may be ascribed to the want of a sufficiently protective Tariff; but none, in our opinion, may be laid to the account of a torpor in that noble spirit of emulation which should be one of our most prominent and distinguishing national traits. If we go to any of the fashionable temples in our large cities for the sale of dry goods of the more expensive and elegant kinds, we shall find, alas! that none of them are made in America. Again we ask, *why not?* Why do our manufacturers confine themselves to the coarser, or at most to medium products, even in cottons and woolens? A broader field, and one with fairer prospects of success, was never presented in any country or amongst any people. The cotton prints of Manchester clothe vast populations, whether in Asia, Europe, on this continent, or even in Africa. Why not the American, also, in fine articles as well as in coarse? Wherefore should so benumbing an influence pall our ingenuity, taste, skill, and enterprise? But we append a few results from an official report of the Factory Inspectors of England, merely observing that the calculations are within their true limits, as the augmentation in all branches since 1857, has been considerable. These figures refer to the factories of Lancashire, Yorkshire, Derbyshire, and Cheshire only. In the return or-

dered by the House of Commons on the 19th of March, 1855, the number of mills, and the number of persons employed therein were, in those counties, as follows:

	Factories.	Persons employed.
Cotton.....	775	132,598
Woolen and Worsted....	329	8,738
Flax.....	60	3,546
Silk.....	23	5,445
Total.....	1,078	152,627

In the return made to the House of Commons, in February, 1857, the account stands thus:

	Factories.	Persons employed.
Cotton.....	1,555	271,423
Woolen and Worsted....	184	18,909
Flax.....	49	6,738
Silk.....	46	10,583
Total.....	1,811	309,653

Sir John Kincaid gives the following tabular statement respecting the changes which have taken place in the chief branches of Scotch manufactures in the course of twenty years, between 1835 and 1857:

	Cotton in all its branches.	Number of hands.
1835.....	159	32,550
1857.....	152	34,698
	Woolen.	
1835.....	90	3,505
1857.....	196	9,280
	Flax.	
1835.....	170	13,409
1857.....	168	31,722

[*Pennsylvania Inquirer*.]

FRANCE AND ENGLAND.—The English papers publish the details of the project of Mr. Charles Boyd, for uniting England and France by a gigantic tubular bridge across the Channel between Dover and Cape Grinez, the nearest points of the opposite coasts. In order to afford a passage for vessels of the largest size, the bridge would rest on one side on the cliffs of Dover, and on the other on the cliffs of Cape Grinez, the French abutments being raised one hundred and fifty-three feet higher than the English, to compensate for the difference of elevation of the cliffs. The bridge would be supported by one hundred and ninety towers, at a distance of five hundred feet apart; each having a light to guide vessels at night, and an alarm bell for a warning in fogs.

The great depth of the channel on the line proposed, is one hundred and eighty-six feet. The bridge would have two or more railways, which, it is estimated, could be traversed in twenty minutes; and it would be so built as to admit the light of day, being lighted at night by gas. In order to prevent all fears of invasion, the projector proposes that each end of the bridge shall be commanded by a strong battery. The towers, which would be one hundred feet in diameter, and two hundred and sixty feet high, would rest on colossal bases, three hundred feet square at the bottom, one hundred and fifty feet square at the top—rising to a height of forty feet above the water—formed of blocks of granite united by iron bars. The elevation of the tops of the towers would thus be three hundred feet above the surface of the water. Mr. Boyd estimates the utmost possible cost of the bridge at £30,000,000, but thinks it could be built for half that sum, and that the whole cost would be reimbursed to the company in eight years. This project seems to promise much better success than that of Mr. Gamond, who proposes to build a tunnel under the channel at a cost of only £4,000,000.—*Washington Globe*.

TO THE STOCKHOLDERS OF THE BARREN CO. R. R. CO.

The company having very favorably contracted the first six sections of the Barren County Railroad, on which an efficient force will be placed at an early day, and having every confidence in the speedy completion of the entire line, we take this method of addressing to the stockholders a word of cheer relative to the present prospects of the road. We also wish to impress you with the importance of prompt payment of your dues to the company. Without producing the slightest impression on your part you may be enabled to pay your calls promptly. The amount of your respective subscriptions is very moderate in comparison with your ability to pay them. We trust that each one of you, when called upon, will feel that upon your promptness depends the success of the road. Relying upon your punctuality the company have made such engagements as they are satisfied it will be your pleasure to comply with. From the spirited competition of bidders, the company are well satisfied that a more favorable contract than the one made, could not have been reasonably expected. With this assurance in addition to the fact that the present able and efficient Chief Engineer is the only employee in the service of the company, and the only one that will be required under its present policy, whatever objections may have heretofore existed on the score of too many officers and agents, is now effectually removed. The very fact of contracting the work, remedies the necessity for other than the services of the Chief Engineer. With the present encouraging promises of success, we entreat the friends of the enterprise to come forward with renewed zeal, with a helping hand, and give us their assistance in the promotion of this important enterprise. At an early day, it will be our pleasure to lay before you an exhibit of the financial condition of the company.—*Glasgow Free Press*.

J. R. BARRICK, Pres't.

OUR TRADE WITH RUSSIA.—The arrival of the schooner *Harvest* at Hamburg, has been noted by the press. She loaded at Sandusky City, and proceeded thence to Cleveland, and through the Lakes and St. Lawrence to Hamburg. She was of 306 tons, was built in Cleveland, and took out a cargo of valuable forest woods for furniture.

Mr. Miller, American Consul at Hamburg, reports to the Department that the proprietors of the steamers between Lubeck and St. Petersburg have made arrangements with those running between Hamburg and New York by which they propose to establish at very low rates of freight, a direct system of transportation from New York to St. Petersburg, via Hamburg and Lubeck. It is stated that hitherto the business between the United States and Russia has been transacted at only two seasons—one fleet of vessels leaving the United States in the spring, in time to arrive in the Baltic by the opening of navigation, and another fleet going to the Baltic late in the autumn, to leave again before the navigation closes. The merchants have, therefore, but two regular communications per annum, and their capital is invested about six months in the purchase and shipment of their goods.

The facilities now combined would enable them to forward goods from New York to St. Petersburg every fortnight during the season that navigation is open, by a transit which would consume but three weeks of time.

The receipts of the Milwaukee and Mississippi Railroad, in March, 1859, were \$38,500, against about \$51,000 last year.

The receipts of the Panama Road for February show a small decrease on last year, but for January and February together, there is an increase. The freight business of the road is steadily increasing, but as the freight which arrives by sea comes very irregularly, the comparison of the business of the Company by months gives no fair indication of the state of the traffic.

ASSESSORS' VALUATION OF TAXABLE PROPERTY IN THE CITY OF BUFFALO FOR 1858.

Wards.	Real.	Personal.	Total.
1st.....	4,223,550	593,400	4,816,950
2d.....	3,341,055	1,392,870	4,663,955
3d.....	1,078,505	8,200	1,086,705
4th.....	2,127,670	75,000	2,102,670
5th.....	1,583,495	15,500	1,598,995
6th.....	917,900	5,000	922,900
7th.....	1,547,395	31,000	1,578,395
8th.....	3,416,075	2,652,850	5,468,925
9th.....	3,931,320	1,383,800	5,315,120
10th.....	2,890,315	305,800	3,197,115
11th.....	2,118,215	230,200	2,348,415
12th.....	1,729,600	32,500	1,762,100
13th.....	1,041,155	10,000	1,051,155
Totals.....	29,446,280	6,063,720	35,510,000
1857.....	29,337,291	8,129,770	37,467,061
1856.....	28,138,049	7,360,436	35,498,476
1855.....	27,323,919	5,713,792	33,037,711
1854.....	25,949,391	4,024,115	29,973,509

STATEMENT OF THE IMPORTS BY LAKE AT BUFFALO, OF FLOUR GRAIN FOR A SERIES OF YEARS.

Year.	Flour.	Wheat.	Corn.	Oats.	Barley.
1835..	139,178	304,090	204,355	28,640	4,576
1837..	126,845	450,350	94,490	2,553	....
1838..	217,620	933,117	34,143	6,577	....
1839..	294,125	1,117,292	....	....	....
1840..	597,742	1,004,561	71,327	....	....
1841..	730,040	1,635,000	201,031	14,144	....
1842..	734,308	1,555,420	434,530	....	4,710
1843..	917,517	1,827,241	223,963	2,489	....
1844..	915,030	2,177,500	137,978	18,017	1,617
1845..	746,751	1,770,740	54,290	23,110	....
1846..	1,374,529	4,744,184	1,455,258	218,300	47,530
1847..	1,857,000	6,489,100	2,832,300	446,000	....
1848..	1,259,000	4,520,117	2,298,100	560,000	....
1850..	1,103,039	3,681,346	2,593,378	359,580	3,600
1851..	1,258,224	4,167,121	5,988,775	1,140,340	142,773
1852..	1,299,513	5,549,774	5,136,746	2,596,231	497,913
1853..	975,557	5,424,043	3,665,773	1,480,655	401,098
1854..	739,736	3,510,792	10,109,973	4,441,739	313,885
1855..	936, 61	8,022,126	9,711,230	2,691,222	62,304
1856..	1,196,048	8,465,671	9,632,477	1,733,322	46,327
1857..	845,953	8,334,179	5,713,611	1,214,760	37,844
1858..	1,536,109	10,671,550	6,621,668	2,275,241	308,371

From the following communication, it will be seen that the Baltimore and Ohio Railroad Company will probably pay regular dividends hereafter in April and October. The communication is in answer to a resolution passed by the Baltimore City Council:

BALTIMORE AND OHIO RAILROAD
President's Office, April 1, 1859.

John W. Randolph, Esq., Chairman.

Sir: Your communication of the 16th ult. was received during my absence from the city.

In reference to your inquiry regarding the probability of the Baltimore and Ohio Railroad Company paying a dividend in April and October of this year, and the amount of dividend that may be paid, I respectfully state that the net earnings and present financial condition of the Company will justify a dividend of 3 ¢ cent for the fiscal half year terminating 31st ult., which doubtless the Board will declare at an early day.

As the Company is now free from floating debt, I see no cause, with judicious management and no extraordinary disaster, to prevent the payment of regular dividends hereafter.

Very respectfully,

Your obedient serv't,

J. W. GARRETT, President.

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SOUTHERN PACIFIC RAILROAD

MARSHALL, Harrison Co., Texas.
March 25, 1859.

To the Stockholders of the Company:

I receive, by every mail, a large number of letters, from stockholders residing in various sections of the Union, making particular inquiries as to the condition of things in Texas, and the progress of the contest now going on in vindication of our common rights. It is utterly impossible to answer these letters. I could not do it, if I were to do nothing else.

I have, therefore, to say to the Stockholders that, in order to obviate the necessity of writing to each individual, I have determined to publish from time to time, weekly semi-monthly, or monthly, or oftener if occasion requires, a concise statement of the transactions in Texas; and the progress of the contest. These Reports will be published in the Texas Republican, Marshall, Texas, R. W. Loughery, Proprietor. The Texas Republican, throughout the existing controversy, has defended the interests of the Old Stockholders. Our Stockholders who may desire to see these Reports, or to get correct information from Texas, should at once subscribe for this paper. The subscription price is \$2 50, which the publisher authorizes me to say can be sent on, by mail, at his risk.

JEPHTHA FOWLKES,

President of the Southern Pacific R. R. Co.

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Orders for the purchase of Goods on Commission, de from our regular business, respectfully solicited

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JOEL C. LANE

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N. E. Corner Vine & 4th.

A CARD.

I take pleasure in announcing that all difficulties between my former partners, in the firm of APPLEGATE & Co., and myself have been amicably adjusted. The business will be continued by them, at the old stand, they settling all the business connected with the firm.

I do not hesitate to recommend my friends to make their purchases of them, as I believe they will find it to their advantage to do so.

JOHN B. RYAN,

Late of the Firm of APPLEGATE & Co.,

Booksellers and Stationers.

Cincinnati, March 1st, 1859.

In referring to the above Card, we take the opportunity of saying to our friends and the public, that the business as heretofore conducted by us, will be continued at the same place and under the same name and style as formerly.

Our stock is very large and varied, having just been replenished for our spring sale. We are prepared to fill all orders, at lowest prices, with promptness and dispatch, guaranteeing satisfaction to all who may favor us with their orders.

We trust by continued exertions to merit a continuance of past favors.

JAMES APPLEGATE,

SAM'L FLICKINGER,

ARTHUR H. POUNSFORD.

Cincinnati, March 1st, 1859.

PAGE'S

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SECOND TRAIN—No. 2 Express, at 8 A. M., connects via Columbus, Bellair, and Benwood; Wheeling, via Columbus, Steubenville, and Pittsburg; via Columbus, Crestline, and Pittsburg; via Columbus and Cleveland; Detroit, via Cleveland and Steamer; Springfield. This train stops between Cincinnati and Columbus at Plainville, Milford, Loveland, Morrow, Spring Valley, Xenia and London.

THIRD TRAIN—Accommodation, at 4:40 P. M., for Columbus and Springfield.

FOURTH TRAIN—Night Express, at 11:30 P. M.; connects via Columbus, Bellair, and Benwood; Wheeling, via Columbus, Steubenville and Pittsburg; via Columbus, Crestline and Pittsburg; via Columbus and Cleveland. This train stops at Loveland, Morrow, Corwin, Xenia and London. *Sleeping Cars on this Train.*

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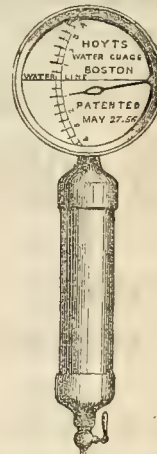
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Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

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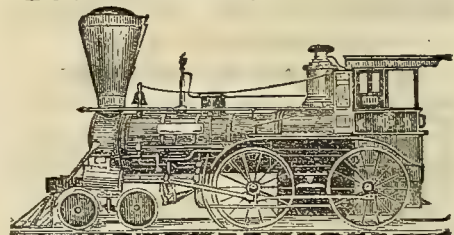
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P. DUDLEY,
President of the Board.

Jan. 5th.

The Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

Thursday Morning, April 21, 1859.

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TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

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We give the title page entire, as explaining, in as few words as possible, the nature and character of the work. We have not had time to examine the work critically, but from a cursory glance should pronounce it a most useful hand-book for every business and professional man, mechanic and house-keeper. The work is sold only by Canvassers and by Kizer & Co., corner Court Street and Western Row.

THE DRUGGIST.—This is another candidate for public favor and patronage, in the shape of a new sixteen quarto page monthly newspaper, published by C. S. WILLIAMS, the well known and popular Directory publisher, of this city, and edited by Prof. H. E. FOOTE, of the Medical College of Ohio. It is, as its name indicates, devoted to the special interest of Druggists. It is beautifully printed, and the number before us well filled with useful and interesting matter. C. PENROSE JONES, Esqr., has charge of the "Market Review," and "Price Current" departments. Terms one dollar per annum in advance. Address C. S. Williams, 194 Walnut St., Cincinnati, O.

METEOROLOGY.

THE WEATHER AND ITS INFLUENCES.

"A very pleasant day," says all the world, when it is pleasant, and brightens into a smile. "A raw, gloomy day," says all the world, and buttons up his coat, and looks cross when a chilly wind blows by. All the world, in fact, talks of the weather, and we don't know why we may not talk about it, once in a long while, even at the risk of impairing our dignity. Well, then, we say this, that *weather* has far more influence upon all the world, than the world supposes; given as it is to weather superstitions. Now, let us look back a little, and count up what weather has done in this region, for the last four or five years.

In 1854, there came in the summer a very extraordinary *drouth*. Commencing, just when the corn was beginning to tassel, it continued during the months of July, August and September, nearly destroying the corn, by drying up all its juices. The result was the crop of 1854, in Ohio, was less by *thirty millions of bushels*, than in the preceding and succeeding years.

This drouth did not continue in the following years; but, seems in the main, to have deranged the succession, or regularity of the seasons. The Summer of 1855, was a pretty wet one, but the crops of 1855 were good. Following these seasons, succeeded a most extraordinary series of winters. The winter of 1855-'6 and the winter of 1856-'7, were remarkably *cold*, and the last was, in the Valley of the Ohio, *the coldest winter* known in the memory of man. In some places the thermometer fell to 24° *below zero*, in Fahrenheit's Thermometer.

The effects of these winters were also remarkable. Many of the forest trees that were old or tender, were killed by mere cold. Almost the whole body of peach trees in Ohio were killed, or most severely injured. In fact, such severe cold, and so injurious, had not been known in the country. In the year 1858, the Spring and beginning of Summer were attended by *rains*, in their character, as extraordinary as the cold had been in the previous winters. These rains fell mainly in May and June, at the germinating and planting season. The effects of these rains were to destroy the germs, and prevent the corn planting, so that there was scarcely any fruit, and not more than *two-thirds* a corn crop, and half one of potatoes. One thing very extraordinary, and farmers say unprecedented, was the *rust in oats*. In fact, the oat crop was almost destroyed. The reports made to the Commissioner of Statistics from all parts of the State, and by him embodied, give these results, viz:

Hay—a full and fair crop.

Corn—Two-thirds in quantity.

Wheat—Three-fourths in quantity.

Oats—One-fifth in quantity.

Barly and Rye—a fair crop.

Potatoes—Half a crop.

Fruit—almost a total failure.

The total loss (reduction from an average crop,) for the State of Ohio, was estimated at *fifty millions of bushels*. In nearly the same proportion was the losses of the adjoining States. We may then realize, arithmetically, how great the loss from merely an excess of rains, occurred in the Ohio Valley. But, the popular *realization* occurs in a different way, and one much more *feeling*. This is in the *rise of prices*. In the Winter of 1858-'9, the following prices prevailed, to which we affix the *rise* above an average, viz:

Corn, bush.....	\$0 80.....	50 per cent.
Wheat, bush.....	1 10.....	10 "
Potatoes, bush....	1 00.....	200 "
Hogs, (100 lbs).....	6 50.....	25 "

The results of this on the cost of living, for laboring men, are very great and very injurious. Hence, we see strikes for higher prices, and other social irregularities, which indicate clearly, that the relations between labor and the cost of living are deranged. Laying these aside, we see enough to know, that the remarkable weather of May and June, 1858, has had very striking effects, not only on crops, but on society. Here we may remark, that in the various efforts, schemes and squabbles of our railroad companies to increase their receipts and make their roads more profitable, they have mistaken the *secondary* causes for the principal. In fact, had the seasons been as fruitful since 1854, as they were previously, (up to 1850,) taking into view an increased population, the Railroads would have had at least *one-third more receipts*; the results of which would have been, that four out of five would have made handsome dividends.

But, let us return to Meteorology, and consider what, and how resulting were the rains of 1858.

The main fact in the rains of 1858, was not so much the increase for the whole year, as it was the increase for the months of May and June. And it must be here observed, that this is the wettest season of the year; but, that in 1858, the rain was greatly increased. It appears from the observations made at Cincinnati, during many years, that the *average* fall of rain is forty-two inches for the year, and ten inches for May and June. But, for these months in 1858, we have these results:

Rain for May and June in Cincinnati.....	14 inches
" " " Marietta.....	15½ "
" " " Steubenville.....	12½ "

Thus we find an average advance in the quantity of rain for these two months, of 40 per cent. The effect of this was greatly increased by the fact, that in much of this time, the winds were cold and easterly. The result was in fruit, a rupture and wilting of the germs. In order that the reader may understand the character of the season, we subjoin the Meteorological table, furnished the Commissioner of Statistics, by Dr. S. P. Hildreth, of Marietta.

METEOROLOGY OF MARIETTA.

Abstract of the *Meteorology Journal kept at Marietta, Ohio, beginning November 1, 1857, and ending November 1, 1858, by S. P. Hildreth.*

MONTHS.	MEAN FOR THE YEAR.		Rain in inches and 100.	WINDS.
	Maximum temperature.	Minimum temperature.		
November.....	62	10	40.37	W. N. W.
December.....	61	10	41.20	W. S. W.
January.....	67	21	40.44	W. S. and E.
February.....	60	25	38.00	W. S. W. and N.
March.....	74	32	40.70	N. and E. and S. W.
April.....	79	26	54.70	W. N. and S. E.
May.....	84	39	60.70	N. E. and S.
June.....	89	48	72.70	S. S. W.
July.....	96	57	75.50	W. S. W. and E.
August.....	95	50	72.13	S. S. W. and N. E.
September.....	91	48	64.33	W. S. W. and S. E.
October.....	85	30	56.66	E. N. and S. W.
Mean for the year.....	53.93	57	59	

REMARKS ON THE WEATHER.—The past year has been remarkable for the great amount of rain, and for being in excess during some months that are often rather dry; the whole being over 57 inches, almost five feet. The average for a series of years is 42 inches, or 3½ feet. So large a quantity of rain was injurious to many crops, especially to oats, potatoes and wheat. The early setting in of wintry cold in November, 1857, froze and destroyed a large amount of the potato crop, both dug and undug. The main temperature is also a degree and a half above the average for this locality, which is 52.25. December and January were both mild and temperate.

We see, in this statement, what was more or less true of every year since 1854—the irregularity of the seasons. We hope, however, that this irregularity is past, and that we are beginning a cycle of more even and fruitful seasons.

March and April, so far, have been more uniform than for several years; and the weather is now moderate. The winter has been moderate. The growth of plants and trees in the winter has been good and steady. The wheat looks well; the fruit trees have had an exuberant bloom; and the ground is in good condition for corn planting.

Under these circumstances, and looking to the compensatory action of nature, we have at least good reason for anticipating a favorable season and good harvests. Indeed, the time has come for a new cycle of climatic and agricultural events, and we expect to see the commencement of a new order of seasons and harvests.

LETTER FROM W. WRIGHTSON.

TUBAC, ARIZ., March 24, 1859.

T. WRIGHTSON, Esq.:

Dear Sir:—I have at last the pleasure of informing you that the timbering of the Salero Mine is done, and that we are ready to commence regular mining operations again on the main shaft. As I have before informed you, this shaft is sunk at the mouth of the old opening, and is already sunk some twenty or twenty-five feet in perpendicular depth. We have timbered it strongly with oak trees of large size—some squaring up as large as sixteen inches. These have been let together at the corner, so as to form a very solid crib, which will undoubtedly last as long as our Company will want to work the mines, and that, I presume, will be a very long time—as they give promise of great profits. The shaft is five feet wide by nine feet long, in the clear, making an area of forty-five square feet. The windlass is securely set at the top, and the wheel barrow—the first probably ever used in Arizona—is ready. We design to put three gangs of hands on this shaft and to sink it as rapidly as possible. We hope to be able, by working the three gangs, to go down three feet per day. This will soon bring us to rich ore. In the meanwhile being anxious to explore the vein more fully, I have begun another opening further down the hill. We have not yet, in this opening, struck good metal, but the vein resembles, in its general characteristics, the surface work of the Salero shaft.

In the Bustillo Mine we have continued the work on the upper shaft, and are now about thirty feet from the surface. We have only been able to keep three peons or one gang, at work on this shaft. They are working very faithfully, however, and begin to show a result of their labors. We have now a vein about fourteen inches wide, consisting principally of crystalline lead and zinc ore, and containing a streak of the sulphuret of silver similar to the rich ore of the Heintzelman Mine. Of course, in sinking working shafts, we expect all the labor to be dead work—but in this shaft I believe the metal we are now taking out will more than pay the expense of sinking it. The metal is improving very rapidly. We have now over two tons lying at the mouth of the mine—all of which will pay for smelting, and the ore now coming out will yield a handsome profit. I shall soon erect a furnace and begin smelting. We are cutting wood for charcoal now. On this same vein we have sunk two other openings. The lower one, at the foot of the hill, shows a vein five feet wide, and is now ten feet deep. The wall rocks are regular, and the walls are as solid and perfect, as I ever saw the walls of a mine. The middle opening is not more than five feet deep, but it shows already some good metal, and will, at a short distance, afford profitable work. It is a matter of regret to

me, that I have not been able to procure peons to push forward this work more rapidly. We are, however, expecting more men very soon.

During the present week I have been to explore a new field—one that our Company has not occupied, and that, I presume, has never before been visited by white men. It is located in a deep cañon, about three quarters of a mile north-west of the Bustillo. The rugged character of the cañon, its craggy cliffs, capping the mountains, and the huge rocks once thrown down their sides, but now water-worn by the storms of ages, shows there has been here some grand convulsion of nature. On the north side of this cañon, the general appearance of the rocks and frequent seams containing mineral deposits, and generally surmounted by what geologists term, "an iron hat," give evidence of some intense heat having at some time operated on the whole mass. Of course, from a simple outside view—without having dug into any of the veins, it is impossible to tell what there is; but, the show is magnificent, and the probability is, that there is here a monster vein which will amply repay our labor. I shall immediately set some one at work here, and endeavor to find out what it really is.

At Tomacacori, we have continued our farming labors, and have some ten acres or more planted in barley. We are now preparing land for corn, and will endeavor to plant some forty acres of it. The crop should yield us a net gain of from three to four thousand dollars, beside the vegetables we may raise in the garden.

Our Newspaper. You have already been notified of the publication of our little sheet, and although it may look to you a small affair to get out such an one, yet, I can assure you, it has been a hard task to me. It is not in every respect such as I could wish it to be, yet I hope to make such gradual changes in it, as will make it more acceptable.

I am much pleased with the prospects of the Company, and I trust the future will soon justify the expectations we have formed.

I am, dear sir,

Yours truly,

W. WRIGHTSON.

POPULATION OF TEXAS.—The population of Texas, as given by the late census, shows a total of 458,620, of whom 138,265 are slaves, 290 free negroes, and the balance whites. In 1850 its total population was 212,492.

The whole number of acres under cultivation is 1,948,215.

The net receipts of the Pittsburg, Fort Wayne & Chicago Road for the second week of April, was \$26,869 19. The Erie Road is some \$90,000 behind thus far in April in receipts, but the earnings will not show so large a falling off. The Central holds up better, but low rates of freight and passenger traffic are having considerable influence upon the earnings.

RAILROAD MISCELLANY.

The earnings of the Michigan Southern Road for the first week of April, are \$31,271, a decrease of \$11,000, as compared with 1858.

Messrs. Robert Bayard and Columbus Seguire have been elected Directors of the Cumberland Coal and Iron Company. The Directors of this Company are: Charles Gould, President; Saml. J. Tilden, Benj. Nathan, E. H. Miller, J. Hall Pleasant, David Palmer, W. H. McVickar, Robert P. Getty, John Riley, Allen Campbell, Nathaniel Marsh, Robt. Bayard, Columbus Seguire.

The holders of the First Mortgage Bonds of the New London, Willimantic and Palmer Railroad Company give notice in the New London papers that a petition will be brought to the General Assembly at its next session, for the passage of a resolution incorporating them as a railroad company, with all the rights, privileges and immunities heretofore granted to the New London, Willimantic and Palmer Railroad Corporation.

The earnings for the first week in April, on the Galena Road is \$21,000, which is about equal to \$90,000 for the month against \$140,000 last year. The first week on the Wabash Valley Road gives \$17,700, but the succeeding days were better. The Rock Island earnings are also small. The receipts of grain at Chicago appear to have almost ceased. On the roads connecting with the West the competition has brought rates of freight to a point paying little or no profit to the roads. We have rumors of contracts at 25c. per cwt., from New York to Chicago, via the Central Road, and the River, for fourth class freight, and on cattle from Buffalo at \$55 per car, but have been able to trace them to no authentic source. Contracts are offered, via the Allentown Road, as low as \$4 per head from Chicago to New York, equal to \$60 per car for the whole distance. At such prices as these the stockholders of the railroads suffering from this competition for the Western business, will look in vain for dividends upon their investments. In addition to the competition for the western business, which the New York roads have had to contend with from Baltimore and Philadelphia, the new and shorter route from the West directly to New York, via Allentown and the New Jersey Central Road, must now be met. The Allentown link will constitute an unbroken gauge between Chicago and New York, seventy-five miles shorter than any other line. This route will be a strong competition for the through business, and has already commenced by offering contracts for cattle at \$4 per head, while the previous rate has averaged \$10 per head. On the 7th inst., the following gentlemen were elected Directors of the East Pennsylvania Road, (the Allentown link): Edward M. Clymer, of Reading; James M. McLean, New York; William M. Heister, Reading; John Mc Mannus, Reading; Charles H. Hunter, Reading; Edward Brooke, Reading; Horatio Trexler, Mertztown; Robert E. Wright, Reading; and John S. Richards, Reading.

The earnings of the Macon and Western Railroad for March, were.....\$34,490 81
1858.....26,191 39

Increase.....\$8,299 42

The earnings of the Cincinnati, Hamilton and Dayton R. R. Co. for March compare as follows:

1859.....\$47,060 70
1858.....39,430 99

The earnings of the Fond du Lac Road in March, were \$22,970 19 against \$19,500 in February.

Messrs. Decoppet & Co. have just concluded a negotiation of \$350,000 of the 7 per cent bonds of the Toledo, Logansport and Burlington Railroad Company. These bonds are a portion of the \$800,000 secured by a first mortgage of which the remainder \$450,000, were used for the purchase of iron by Robert Benson & Co., of London, through Messrs. M. C. Jesup & Co. This road connects the Peoria and Quawaka Road with the Toledo and Wabash, a distance of 61 miles. The negotiation of the above bonds secures the completion of the road, which it is expected will be ready for business by October next. The peculiar feature of these bonds consists in their being received under contract by the connecting roads extending from Logansport to Buffalo for one-half the freight charges on all business passing over the connecting roads to or from the Toledo, Logansport and Burlington. This will furnish a constant absorption for them, and it is estimated that in three to five years they will be all absorbed.

The following is the schedule of prices adopted by the Pennsylvania Coal Company:

PRICES for Pittston coal, of this year's production, delivered on board of vessels at Port Ewen, during the months of May and June, 1859:

Lump.....	\$3.00.....	per ton of 2,240 lb.
Steamer.....	3 00.....	per ton of 2,240 lb.
Grate.....	3 15.....	per ton of 2,240 lb.
Range.....	3 30.....	per ton of 2,240 lb.
Nut.....	3 50.....	per ton of 2,240 lb.
Chestnut.....	2 75.....	per ton of 2,240 lb.
Pea.....	2 15.....	per ton of 2,240 lb.

The above prices are for cash.

At a meeting held on the 6th inst. of the lines of road terminating at St. Louis and connecting with the East, the Ohio and Mississippi, the Terre Haute, Alton and St. Louis, the Great Western of Illinois, the Illinois Central, and the St. Louis, Alton and Chicago, the following resolutions were adopted:

Whereas, We are advised that the roads terminating at the East on the Atlantic have commenced reducing the rates of both freight and passengers which were current 5 days ago; and, *Whereas*, we regard our proportion of the then rates as barely remunerative for the service performed; and, *Whereas*, we have reason to fear that the causes which have led to the present reduction, as advised, will lead to still further and more ruinous ones; and, *Whereas*, our Companies are not in a condition to enter upon a line of policy at war with their safety, and destructive of their stock and bonded interests; and, *Whereas*, while we do not design to arrogate to ourselves the right to fix rates for lines East and North of us, which are unrepresented here, we do claim the right of self preservation, and of respectfully saying to the lines with which we are connected, we must have compensating rates for the service performed in connection with them; therefore,

Resolved, That the minimum rates of the lines here represented, having, with their connections, a terminus at St. Louis, shall be, on freights contracted from any points beyond the terminus of their roads, as follows:

RATES IN CENTS PER HUNDRED POUNDS.

	1st class	2d.	3d.	4th.
Indianapolis to St. Louis.....	45	37	33	28
Cincinnati to St. Louis.....	49	40	35	30
Chicago to St. Louis.....	38	31	27	24
Joliet to St. Louis.....	38	31	27	24
Matteson to St. Louis.....	38	31	27	24
Ltate Line of Ills. to St. L.....	38	31	27	24

And on passengers, that they will require as their proportion on through tickets the rates adopted at the Philadelphia General Ticket Agents' Convention, held Oct. 20, 1858, except as these rates have been modified by general mutual agreements; that in the sale of tickets Eastward from St. Louis they will maintain fully the prices established by said Convention.

Resolved, That all freight shipped from the East and contracted over the roads here represented, after the 15th inst., at the place of shipment, shall be charged to the rates as here agreed to.

This action we consider decidedly sensible.

The New Haven, New London and Stonington Railroad is going to apply to the next Legislature for authority to issue 7 per cent. mortgage bonds to the amount of \$250,000

The earnings of the Central Railroad Company of New Jersey for the month of

March, 1859, were.....\$75,163 68
March, 1858.....64,063 38

Increase (17 per cent).....\$1,100 30

The earnings of the Terre Haute, Alton and St. Louis road for the month of

March, 1859, were.....\$82,601 19
March, 1858.....71,230 24

Increase.....\$11,370 95

The first quarter of this year, as compared with 1858, is as follows:

	1859.	1858.
January.....	\$67,011 13	\$57,128 86
February.....	63,720 47	52,327 72
March.....	82,601 19	71,230 24

Total.....\$213,332 79

Increase.....\$32,645 96

(Being about 18 per cent.)

Compared with the same month of last year the Baltimore & Ohio Railroad shows the following result:

	Main Stem.	N. W. Virg.	Wash. Branch.	Total.
March, '58.....	\$368,917 17	\$27,721 53	\$42,615 51	\$439,256 23
March, '59.....	339,444 21	29,799 80	40,317 01	410,461 21

Total decrease for March, 1859.....\$29,195 02

The fiscal year of the Company commenced with October. The receipts of the first six months of the present year compare with those of the previous year as follows:

	1858.	1857.
October.....	\$301,503 02	\$296,194 45
November.....	389,659 22	361,443 48
December.....	366,361 01	379,239 02
1859.		1858.
January.....	\$327,176 63	\$317,513 73
February.....	321,391 10	377,044 49
March.....	410,161 21	439,081 02
Total.....	\$2,171,152 19	\$2,173,583 43
Decrease present year.....		\$2,391 39

STATEMENT OF FLOATING DEBT AND AVAILABLE MEANS.

Debt.	
Amount of bills payable.....	\$4,343 27
Balance of interest uncalled for due on Company's Bonds.....	16,355 00
Balance of interest uncalled for due on bonds of the North-Western Virginia R. R. Co....	700 00
Total.....	\$22,398 97

Available Means.

Uncollected Revenue—judged to be the same as on the 1st, when it was.....	\$274,395 88
Cash on hand.....	109,048 00
Bills receivable.....	43,422 99
Total.....	\$426,866 87
The bills payable on March 9, the date of the last statement, amount to.....	\$6,232 10
The bills payable at the present date amount to.....	4,343 97

Showing a decrease of.....\$1,385 13

At the regular monthly meeting of the Board on Wednesday, it was resolved, after these statements had been presented, that a dividend of 3 per cent. be declared on the stock of the Baltimore & Ohio Railroad Company from the net earnings of the main stem, and 4½ per cent on the stock of the Washington Branch Road, the former payable on the 18th of May next, and the latter on the 25th inst., at the Merchants' Bank of Baltimore.

The receipts of the Leigh Valley Company for the month of March, ult., show an increase of over \$6,000 over the corresponding month of last year.

Thompson's Bank Note Reporter gives the following information in regard to the P. O. scrip about to be issued:

Contractors for carrying the mails are to receive in lieu of money, acknowledgments of indebtedness, as follows. This P. O. scrip when properly assigned, will be negotiable; and when it appears in the market, we shall try to give it a cash quotation:

POST OFFICE DEPARTMENT,
WASHINGTON, ——— 1859. }

SIR, Your account for transporting the Mails of the United States on route No. ——— in ——— for the quarter ending ———, 1859, has been audited, and the Auditor for this Department has certified that there is due you the sum of ——— dollars ——— cents, (\$——)

Owing, however, to the failure of Congress to make the necessary appropriation for the mail service, during the present fiscal year, payment of the above amount must be deferred until Congress shall provide the means for that purpose. If you should find it necessary negotiate for the amount of your Mail pay, the annexed form of assignment should be used, (and without disconnecting it from this letter,) adding thereto the residence of the Assignee.

Respectfully,

* * * * *
Postmaster General.

To the Postmaster General:

I hereby assign and transfer to ——— the sum of ———, being the amount due to me for transporting Mails of the United States on route No. ———, in the State of ———, for the quarter ending ———, 1859, according to the foregoing letter of the Postmaster General.

Witness, _____,
Witness, _____,

Contractor, route No. ———.

(One witness should be the Postmaster where the assignment is drawn.)

CLEVELAND AND BUFFALO STEAMBOAT LINE.—“We learn that the Forester will run as the consort of the Arctic in this Line, until the Sea Bird is ready. She will leave Cleveland on Tuesdays, Thursdays and Saturdays, and Buffalo on alternate days. The Arctic is expected from Chicago to-morrow, and will put the ball in motion by starting from Cleveland on the 18th, the Forester following the next day.”

So says the Detroit Tribune.

CAIRO AND FULTON RAILROAD.—At the Annual meeting of the Stockholders of this road, held at Cape Girardeau, on the 14th inst., the following are the Board of Directors that was elected:

M. Brayman, of Springfield, Ill.; S. Sexton, Chicago; D. F. McCrellis, Ill.; H. H. Bedford, Charleston, Mo.; S. G. Kitchen, Bloomfield, Mo. At a subsequent meeting of the Directors, M. Brayman, Esq., was elected President; S. Sexton, Vice President and Superintendent, and S. R. Teasdale, Secretary and Treasurer.

GREENVILLE AND COLUMBIA R. R.

PRESIDENT'S REPORT.

The President and Directors submit the following report, embracing the operations of the Company for the year 1858, and the condition thereof on the 1st of January, 1859.

The reports of the General Superintendent, Auditor and Treasurer, and Master of Machinery, are full and particular as to the business in their different departments.

The tabular statements of J. P. Southern exhibit the fiscal affairs.

Table No. 1 is an exhibit of the Capital Stock and liabilities, and the property and assets. From this it will be seen that the capital stock and assessment—

Amounts to.....	\$1,429,007 92
Bonds issued.....	1,145,000 00
Other liquidated debts.....	214,002 58
Surplus income.....	131,544 12

Amounting in the whole, to..... \$2,919,554 62

This sum is balanced by the cost of the road, its equipment and assets. This falls short of the true value of the road, or wealth of the company. It is believed that the road could not now be built and furnished as it is for less than four millions of dollars. There have been added to the cost of the road, during the year, \$99,892 77. The entire cost of the road and its outfit, including all that has been added for its re-construction, amounts to \$2,763,930 33, or \$16,827 per mile. Under all the circumstances, we think that you must be satisfied that it has not cost too much money.

Table No. 2 is a statement of the annual receipts and disbursements of the Treasurer, whose accounts are well kept, being both neat and accurate.

Table No. 3 is an exhibit of the expenses of working the road.

The expenses as shown by it amount to.....	\$215,320 94
The expenses of the previous year were.....	210,405 14

Excess of expenses of the last over the previous year..... \$4,915 80

In this amount of expenses is included the sum of \$6,990 37, which was paid for cotton burnt on the joint platform in Columbia in 1855. If this sum is deducted from the expenses, which should be done, as it forms no part of the expenses of the year 1858, then the expenses of the year will be less than for the previous year, by \$2,074 57.

Table No. 4 is an exhibit of the business done, amounting to.....	\$340,150 46
To which may be added amount received from minor sources.....	1,040 10

The business of the previous year amounted to..... 294,627 71

Showing an increase of..... 46,562 85
To which add expenses diminished..... 2,074 57

And we have a business of..... \$48,437 42 better than that for the previous year.

When we consider that this increase of business has been done at less expense than heretofore, we are led to believe that as soon as the road shall have been built, that a much larger business may be done without increasing the expenses. When it was said in the last annual report that the falling off in the business of that year was believed to be caused by the withholding of the planters of the crop of cotton of 1857, and that it might be expected that it would be brought forward in the year 1858, and that the falling off, which amounted to about \$13,000, would be made up, it was not expected that the business would increase to the handsome sum of forty-six thousand dollars. This increase, under the

circumstances, is encouraging, and leads us to hope that you may yet realize a profit from your investment.

The debt of the company is not yet all funded; a small amount still remains as a floating debt. The bonds ordered to be issued, if sold at a fair price, are sufficient to cover the debt, so that in the judgment of the Board, it would be unwise and unnecessary to make a further issue of bonds. We are also of opinion that, if from any casualty or press of circumstances it should become necessary to issue an additional amount of bonds, good faith requires that the bonds already ordered to be issued should have a preference and prior lien upon the road to any subsequently to be issued, except it be to discharge those already having a lien.

It is also the deliberate judgment of the Board that, as soon as the first bonds fall due, the mortgage which is the only lien upon the road, should be discharged by the payment of the debt secured by it, and that then all the bond creditors should be equally secured in their debt. In order to meet objections to the bonds which had some effect upon them in reducing the price, we felt it to be our duty in the form of resolutions, to publish our opinions as expressed above, which we trust will meet your approbation.

It is with pleasure that we can say that, throughout the pressure in money matters, the credit of the Company has remained good, and that it is now fair. In maintaining this sound state of credit, we have been greatly indebted to John S. Ryan, of the city of Charleston, whom we selected as our broker. We have upon all occasions, when we needed aid, found him willing, active and efficient.

From the Report of E. F. Raworth, General Superintendent, it will be seen that the work of construction and repairs has been carried on without relaxation. All the works of construction that were commenced at the time of the last report, except the Broad River bridge, have been finished. This bridge will be finished in the month of May next. The work of filling trestles at Rocky River, Bush River, and at Robertson's branch, is now under contract, and will be completed in the course of the present year. When these fills are made we will have but a few more long trestles to fill. The trestles at Frost's Mill, Long Cane and Crim Creek, should be filled as early as possible. All who have the interests of the company at heart, or who are concerned in working the road, will rejoice when these works are done. We will then have a road that will compare favorably with any other road in the country. In the way of repairs, a large amount of work has been done. Nearly one hundred thousand cross-ties and stringers have been used at a cost of \$25,377 60. In the course of two years, nearly eighty miles of the road have been re-laid with timber. The payments for maintenance of way were \$4,277 15 less the last than the previous year. The road is in good repair. We take pleasure in bearing testimony to the statement of the General Superintendent, that the road is in better condition than it has ever been heretofore.

The report of J. B. Browne, master of machinery, gives an account of the machinery and the working of the engines. The business of the shops at Helena is well regulated, and the motive power and cars are in good condition. The shops are kept up at heavy expense, but they are necessary. We have endeavored to keep the expenses within proper bounds, and in proportion to the work done.

The officers and men in the employment of

the company are skillful and prompt in the discharge of duty. They are all commended to your favorable consideration.

STATEMENT NO. 1.

	Dr.
Capital Stock.....	\$1,207,598 92
Assessment on Capital Stock.....	221,409 00
	\$1,429,007 92
Company's 7 per cent. Coupon Bonds.....	1,145,000 00
Company's Bonds, short date..	3,500 00
Bills payable.....	210,502 58
Surplus income Account.....	214,002 58
	131,544 12
Total.....	\$2,919,554 62

	Cr.
Cost of Road—	
Main Line.....	143 $\frac{1}{2}$ miles.
Abbeville Branch.....	11 $\frac{1}{2}$ "
Anderson Branch.....	9 $\frac{1}{2}$ "

Total..... 164 $\frac{1}{2}$ miles. \$2,439,769 62

Outfit of Road, Locomotives and Cars..... 324,160 81

\$2,763,930 32

Real Estate.....	30,234 83
Bills receivable.....	21,404 65
Negro Property.....	665 27
Stock in Laurens R. R. Co.....	4,420 00
Stock in S. and U. R. Co.....	33,271 66
S. and U. R. R. Survey, Bal.....	129 01
Suspense Account.....	1,585 14

Rebuilding Broad River Bridge, payments..... 61,475 73

E. Saunders, Clerk Work-shops, Disbursing Account, Bal..... 30,411 18

Cash, Balance in Treasury 31st of December, 1858..... 18,500 02

15,002 54

Total..... \$2,919,554 62

STATEMENT NO. 2.

To receipts from—	Dr.
Cash, balance in Treasury 1st January.....	\$24,580 04
Capital Stock.....	\$418 00
Assessments on Capital Stock.....	69,652 00
Company's 7 per cent. Coupon Bonds.....	122,000 00
Bills payable.....	661,107 79
Real Estate.....	1,185 38
Income of Road.....	342,362 51
Income from minor sources.....	1,040 10

Reduction, E. Saunders, Clerk Workshops, Disbursing Account, balance 1st January..... 1,197,765 78

20,141 31

Total..... \$1,242,487 13

By Disbursements on—	Cr.
Right of Way.....	\$500 00
Graduation.....	15,184 22
Masonry.....	4,558 60
Iron Rails.....	5,476 58
Spikes and Chairs.....	951 64
Timber for Track.....	150 22
Trestle Bridging.....	23,890 82

Depot and Water Stations..... 1,853 11

Workshops, Buildings..... 829 33

Passenger and Freight Cars..... 16,150 75

Bills Receivable..... 1,060 39

Expenses Bureau Department..... 21,155 64

Profit and Loss..... 30,287 50

Bills Payable..... 717,980 55

Interest and Exchange, Balance..... 16,098 51

Interest on Coupon Bonds..... 73,657 50

Rebuilding Broad River Bridge payments..... 30,411 18

906,802 02

Maintenance of Way—

Amount chargeable to account prior to 1858..... 53,247 06

Amount chargeable to Account, 1858..... 67,032 70

Conducting Transportation—

Amount chargeable to Account prior to 1858..... 41,377 41

Amount chargeable to Account 1858..... 87,070 86

E. Saunders, Clerk Workshops, Disbursing Account, Balance..... 18,500 02

267,228 05

Cash, Balance in Treasury, December 31, 1858..... 15,002 54

Total..... \$1,242,487 13

THE MISSISSIPPI CENTRAL RAILROAD.—The Grenada Republican says the work of this road will be completed to Coffeeville before the 1st of June.

The subjoined table is the annual statement of the seventeen leading Railroads in Great Britain, for the year 1858, prepared for and published in the *London Times*. The pounds are reduced to dollars:

RAILWAYS.		Amount of Stock.	Amount of Bonds.	Total Cost.	Gross Receipts.	Total Expenses.	Net Receipts.	Amount Paid for Interest.	Available for Dividend.	Rate of Dividend Paid.	Ratio of Expenses to Receipts.	Market price of Stock.
London and North Western.....	£118,000,000	56,550,000	174,550,000	15,500,000	7,600,000	7,850,000	3,250,000	4,550,000	750,000 1½	40-19	95½	
Great Western.....	63,000,000	52,550,000	117,550,000	2,000,000	3,200,000	2,750,000	4,100,000	1,500,000	1,500,000 1	40-19	95½	
South Eastern.....	41,500,000	13,000,000	54,500,000	9,250,000	3,200,000	2,750,000	1,000,000	1,250,000	1,250,000 4	48-59	72	
Great Northern.....	41,000,000	17,500,000	58,500,000	6,250,000	3,300,000	3,300,000	1,275,000	1,725,000	1,725,000 4	52-15	93½	
Eastern Counties.....	41,000,000	14,000,000	55,000,000	5,500,000	3,000,000	3,500,000	1,000,000	1,200,000	1,200,000 2	50-07	60½	
London and South Western.....	35,000,000	15,000,000	50,000,000	5,250,000	1,950,000	2,350,000	600,000	1,500,000	1,500,000 6	43-22	93	
London, Brighton and South Coast.....	35,000,000	10,000,000	45,000,000	4,000,000	1,725,000	1,725,000	800,000	1,400,000	1,400,000 2	41-79	113	
North London.....	2,000,000	2,000,000	4,000,000	450,000	320,000	320,000	80,000	280,000	280,000 2	38-78	68½	
North Eastern.....	2,000,000	1,500,000	3,500,000	9,500,000	450,000	350,000	85,000	265,000	265,000 2	32-01	102	
Midland.....	21,000,000	22,000,000	43,000,000	11,500,000	4,300,000	4,840,000	2,550,000	2,350,000	2,350,000 4	46-25	92	
Manchester and Yorkshire.....	21,000,000	22,000,000	43,000,000	10,500,000	3,550,000	4,000,000	2,500,000	1,500,000	1,500,000 3	44-17	100½	
Manchester S. and Lincoln.....	16,000,000	17,500,000	33,500,000	6,100,000	2,800,000	3,300,000	1,300,000	1,500,000	1,500,000 3	53-73	93½	
North Staffordshire.....	14,000,000	14,000,000	28,000,000	2,500,000	1,300,000	1,300,000	500,000	350,000	350,000 2	40-42	88½	
Derby and Exeter.....	14,000,000	6,500,000	20,500,000	950,000	700,000	500,000	300,000	270,000	270,000 2	56-54	72½	
Great Central.....	22,000,000	12,000,000	34,000,000	19,000,000	1,300,000	1,300,000	530,000	400,000	400,000 3	45-59	93½	
Great Southern and Western, Ireland.....	20,000,000	1,500,000	22,500,000	1,700,000	1,700,000	1,650,000	1,650,000	300,000	300,000 5	43-92	93	
										39-42	105	

We would direct particular attention, first, to the fact that while the cost of these English roads has been on the average five times that of our American lines, they still pay enormous sums by way of interest on Bonds and preference shares, and with one exception pay fair dividends to their stockholders. A few years ago, most of these roads were broken down, just as the bulk of our roads were in 1857. It was then generally stated and believed that the era of railroad property was over; that the

Balance in Treasury, April 1st, 1856.....	\$28,096
Receipts for two years ending March 31st, 1858....	639,042
Total.....	\$667,138
Expenditures same period.....	666,788
Balance in Treasury April 1st, 1858.....	\$350
Receipts from April 1st, 1858, to Feb. 16th, 1859..	238,803
Total.....	\$239,152
Expenditures same period.....	237,494
Balance in Treasury Feb. 16th, 1859.....	\$231,658

* These figures give the number of Custom House entries of whalers at various ports—some of the vessels entering at three, four and even five ports during the year. The actual number of different whalers during 1858, spring and fall seasons, will not exceed 230.

ON THE EFFICIENCY OF THE STEAM CASING OR STEAM JACKET IN STEAM ENGINES.

BY GORDON MCKAY, ESQ.

The importance which the steam engine has assumed in the industrial affairs of the world, its universal use, the amount of money daily expended in keeping its strong arm in motion, and the extent to which it affects the interests of every member of society, render any investigation of its principles, whereby new features are developed, or old, and partially neglected ones are resuscitated, and shown to be valuable, of importance sufficient to excuse me for seeking a space in the pages of your valuable *Journal*, to lay before the public the results of some experiments, made with the view of testing the efficiency of the "steam casing," or "steam jacket," on the cylinder of the steam engine.

I was led to these inquiries by noticing the almost universal neglect of this principle, in this country, particularly in non-condensing engines, and by the equally universal application of it to the Cornish condensing engines in England, where the highest economical results have been attained, and this question suggested itself. Is the steam jacket economically applicable only to the condensing engine?

It may be well here to describe what the steam jacket is. Although the history of the steam engine, and its various parts, have now become almost as familiar as household words to the engineer, there may be some who will read this article, by whom the term is not understood. The "steam jacket" was an invention of Watt's, and forms the first claim in his patent of 1769, the principles of which he describes in the following words: "First, that vessel in which the powers of steam are to be employed to work the engine, which is called the cylinder in common fire engines, and which I call the steam vessel, must, during the whole time the engine is at work, be kept as hot as the steam that enters it. First, by enclosing it in a case of wood or any other materials that transmit heat slowly. Secondly, by surrounding it with steam or other heated bodies, &c." This he did by making the cylinder of his engines double, or one cylinder within another, the space between them being filled with steam taken from the boiler, and having its full pressure and consequent temperature. The outside cylinder was encased with wood, or other non-conducting substance, to prevent loss of steam in the jacket.

There are many engineers of high standing, who deny the efficacy of the steam jacket, and consider protecting the cylinder by non-conductors, as the utmost limit to which it is possible to carry economy in this direction; and they argue with some plausibility, that the cylinder will require just as much steam to keep it at a certain temperature if heated from the outside by a jacket, as it will if heated by the steam used in the cylinder to propel the machinery, while the jacket, necessarily having a greater radiating surface, will radiate more heat externally, and hence prove a positive injury. To ascertain the economy of the steam jacket, to what extent it is economical, and for what reason it is so, was the object of my experiments.

With this view, I had a small steam engine and boiler made. The boiler was a vertical one, about two feet in diameter, and six feet high, having an internal fire box and tubes. The engine was attached to the boiler, the cylinder being at its upper end, and placed

above the water line in the boiler; and the shaft and balance wheel below. The valve is what is known as the lap valve, so arranged as to cut off the steam at one-half stroke. The cylinder was two inches in diameter, and the stroke eight inches; it was jacketed, and steam conveyed from the boiler to the jacket by a pipe, and the water condensed in the jacket, carried back to the boiler by another pipe, discharging below the water line into the boiler. Cocks were so arranged in these pipes that the steam could be cut off from the jacket altogether, or be admitted to it, and the condensed water returned to the boiler, or be taken from the jacket in a vessel and not returned to the boiler.

A dynamometer was applied to the balance wheel to measure the power, and a counter attached to the engine shaft to record its revolutions. A glass water gauge indicated the height of the water in the boiler, and a graduated scale on the gauge, the weight of water that the boiler contained. This scale was adapted to the expanded state of water at a temperature of 342°. The reservoir which supplied the force pump, was placed on a platform scale, and the water taken from it to the boiler carefully weighed. The boiler had also a steam pressure gauge, and during the experiments, the pressure was maintained at 115 pounds with great accuracy. The exhaust steam of the engine was used to make the draft, which was regulated by a closely fitting door in the ash pit, by adjusting which, the steam pressure could be regulated with great facility, a variation of one pound either way from 115, would cover the errors arising from that source. The cylinder of the engine was encased outside the steam jacket, with cotton about four inches thick; and during the experiments the safety valve was not allowed to lift.

The engine, when completed, was kept in motion for about fourteen days, in order to get it in such a state that its friction and leakage would remain constant during the experiments; and care was taken that the oiling should be alike in each case.

The first experiment was made with steam in the jacket, the condensed water being returned to the boiler.

The pressure on the boiler was.....115 pounds.
The initial pressure in the cylinder was..... 95 "

(This was obtained by indicator diagram.)

The weight on the dynamometer scale, 7½ pounds, corresponding to about 1 horse power.

The duration of the experiment..... 8 hours.
The revolutions made.....97,440
The water evaporated from the boiler485 pounds.

By a subsequent experiment, the water returned to the boiler from the jacket, was ascertained to have been 15.7 pounds for the 97,440 revolutions. Making the whole water evaporated, 500.7 pounds.

The second experiment, without steam in the jacket, was continued eight hours, but the number of revolutions was a little less than in the first case, and the results as to water evaporated, have been corrected to correspond with the number of revolutions in the first experiment, to facilitate comparison.

The initial and boiler pressures, the same as before.

Weight on dynamometer the same.
Duration of experiment.....8 hours
Revolutions (corrected)..... 97 440
Water evaporated..... 630 pounds.

These experiments were then repeated with sensibly the same results.

From a measurement of the size of the steam ports, clearance and fill, of the cylinder, a computation of water (as steam) required to supply the engine for 97,440 revolutions, with 95 pounds pressure, gives 321 pounds. Hence, in the first experiment we have the following:

Revolutions.....96,440
Initial pressure..... 95 pounds.
Boiler "..... 115 "
Water used in the engine, as computed, 321
" condensed in the jacket..... 15.7
" used in leaks of joints, boiler, &c 164.0
Total water evaporated.....500.7 "

In the second experiment (without jacket,) we have:

Revolutions..... 97,440
Initial pressure..... 95
Boiler "..... 115
Water used in leaks of joints as before... 164
" used in the engine.....466

Total water evaporated.....630 pounds.
From the above it is evident that the water used in the engine and jacket was...321+15.7=336.7 p'ds.
While in the second, without jacket, the water used was.....466

Showing a saving by the jacket of.....129.3 "
Or if the leaks be added, the result
is the same.....336.7+164=500.7 "
566.0+164=630.0 "
Difference.....129.3 "

I think this result clearly shows the jacket to be economical, and in this instance the economy amounts to a saving of 129 in 466 of the necessary quantity of steam, if there had been no leaks; or of 129 in 630, with leaks to the extent of the present case, or about 20 per cent. with leaks.

The question now arises, will this ratio hold good in all cases, and upon what principles is the saving by use of the jacket, or rather the waste (condensation,) for the want of one to be computed.

Let us trace the action of steam through one revolution of the engine. The valve is opened, at the commencement of the stroke, and steam enters the port, and space between the cylinder head and the piston; all the surfaces surrounding these spaces are at a lower temperature than the steam, and a portion of it is condensed by imparting its heat to the surrounding surfaces. The piston now begins to move, and as it passes onward exposes new condensing surface to the steam, and more is condensed, and this process continues until the cut-off valve closes, and expansion of steam commences in the cylinder. At this point the cylinder is, to a certain extent, in the same condition as the boiler, containing steam and water, and as the piston advances and the pressure is decreased, the water in the cylinder is again converted into steam, and thus if the expansion is continued long enough, the whole condensed water is re-evaporated. The exhaust valve now opens, and the return stroke of the piston is made, with a temperature of steam corresponding to the exhaust pressure. From these considerations, I think it evident that condensation will be as the extent of condensing surface up to the point of cut-off, and as the number of revolutions, it will also doubtless be effectual by the difference of initial, final, and exhaust temperatures. Precisely what effect these temperatures will have, I am at present unable to state, my experiments extending only to pressures as stated before.

The steam condensed in the cylinder of a steam engine, has been heretofore stated as a certain per cent. of the steam used, and attempts have been made to ascertain that per cent. for different degrees of expansion; but it is evident that if the condensation depends upon the condensing surface, no per centage of the steam used can be given which will apply to cylinders of all sizes; as the ratio of condensing surface, to the capacity of the cylinder, will vary in almost every engine. Let the condensation then be computed per square inch per stroke, and in the present instance it will be found thus: The whole con-

densation is given as 129.3 pounds, or 3581 cubic inches, which, divided by the number of strokes, 194,880, is .01837, this, divided by the square inches of condensing surface, which was rendered non-condensing by steam in the jacket, 23.55, gives the quantity as 00078 cubic inches of water condensed by each square inch of unjacketed surface in the cylinder at any stroke of the piston; and this may be considered as correct for engines having initial and exhaust pressures corresponding to the one experimented upon, viz: initial 95 pounds, and exhaust 17 above a vacuum.

In addition to the above method of ascertaining the condensation, I have obtained nearly the same result from a locomotive, where I had an indicator diagram taken with nearly the same initial, and exhaust pressures, and where the condensing area, and dimensions of the cylinder were known. The excess of water on the state of steam in the cylinder at the end of the stroke, above that at the point of cut-off, as shown by the steam pressures at these points, amounted to .0008 cubic inches per square inch of condensing surface; a quantity a little greater than that obtained in the experiment, yet so near as to be corroborative. It may be here remarked, as illustrating the truth of the assertion, that the condensation is as the surface and as the strokes, and not a per cent. of the quantity of the steam used, that the ratio of condensing surface to the contents of the cylinder, was, in the experimental engine, as 14 to 35, while in the locomotive it was as 16 to 12, and the revolutions as 200 to 168.

The next inquiry that suggests itself is, how can this saving in the use of the jacket be accounted for? I think the answer will be found in the fact, that if heat be taken from the steam inside the cylinder to maintain its temperature, the only heat that is available for that purpose, is the sensible heat, that is, the difference of the temperatures due to the initial, and final pressures; or in the experiment cited before $328^{\circ}-220^{\circ}=108^{\circ}$, 328° being the temperature of steam at 95 pounds pressure, and 220° that of steam at 17 pounds pressure. It may at first seem that the latent heat is applied to heating the cylinder, inasmuch as the steam is in part condensed, as shown by the diagram of the locomotive cylinder, and therefore its latent heat must be evolved. But it also seems from the locomotive diagram, that the same water was reconverted into steam, thereby resuming its latent heat, hence the sensible heat is all that remains in the cylinder. While if the steam is used in the jacket, the latent heat is applied to the cylinder, and this amounts in the present instance to $1202^{\circ}-342^{\circ}=860^{\circ}$, 1202° being the total heat in the steam, and 342° the temperature of the water that was returned to the boiler from the jacket. If this solution of the question is correct, the product of the condensed water inside the cylinder, multiplied into the temperature assigned to it, should equal that of the water in the jacket, multiplied into its temperature, or $129.3 \times 108^{\circ}=13,964$, which should equal $15.7 \times 860^{\circ}=13,502$.

The result is not exact, but sufficiently so to induce considerable confidence in the theory.

The preceding experiments and deductions are not by any means sufficient to enable me to determine fully the laws which govern the condensation of steam in a cylinder, they only fix one point for one degree of expansion, and one final and initial temperature, and in order to a full investigation of this interesting subject, more extensive experiments are necessary. They are, however, sufficient to show

that the steam jacket is not a myth, but has a real value which can be accounted for on sound principles, and also that it is advantageously applicable to non-condensing as well as to condensing engines.

REMARKS.—Hirn's Experiments on the Steam Jacket.

The interesting communication of our correspondent, reminds us that we have had lying upon our table for some months, a long memoir upon the subject of the steam jacket, communicated to the Industrial Society of Mulhouse, by G. A. Hirn, and read before that Society, on 25th April, 1855.

The experiments of M. Hirn were tried upon an engine of Woolf's construction, (double cylinder with expansion and condensation,) and each experiment lasted a day. The machine, with its jacket in action, with a pressure of 3.75 atmospheres in the smaller cylinder, gave 104 horse power; when the jacket was not used, with the same pressure, and all other circumstances the same, it gave 79.5 horse power; showing a gain of 23.5 per cent., which agrees very well with the results of our correspondent.

We propose, when we can find leisure, to condense the very valuable memoir of M. Hirn for our readers. In the meantime we give his conclusions.

1. The steam jacket produces a saving of power of 23.5 per cent. in a condensing and expanding engine.
2. The jacket does not act by avoiding the external loss of heat.
3. It owes but a small part of its useful effect to its power of drying the steam.
4. It owes but a small part of its useful effect to the excessive expansion of the vapor, (acting as a gas,) from the greater heat of the walls of the cylinder.
5. When saturated steam expands without additional heat, it is partially condensed; and the prevention of this condensation is the origin of the economy of the steam jacket.
6. The actual economy of fuel produced by the steam jacket is but 22.2 per cent., and not 23.5 per cent., as was deduced from the comparison of the powers.
7. No other practical means has yet been found to replace the action of the steam jacket.

He recommends as secondary means of increasing the useful effect of the engine:

First to surround the steam jacket with the smoke flue, as suggested by M. Dollfus; and,

Secondly, to keep always the steam in the boiler, and consequently that in the jacket, at the highest pressure possible.—*Jour. Frank. Institute.*

PENSACOLA AND GEORGIA R. R. COMPANY.

The contractors for the work in Columbia county commenced last May at Columbus with 30 hands. Since then this force has been increased to 50 hands on the grading. They have "cleared" some 15 sections. After grading the two sections immediately east of the Suwannee, they removed with their hands to the vicinity of Alligator, where they are now employed on the heavy sections. They have sub-contracted some sections of their line to other parties, and assisted by this additional force, they have nearly worked out some eight sections contiguous to Alligator, making 10 miles in all, in Columbia County, now nearly ready for the super-structure.

The contractors have some work done, under their contract for Suwannee bridge, on the masonry of abutments, etc. Their force stationed at the Suwannee is employed, some quarrying stone, some on the masonry, and others at the steam saw mill they have erected, preparing timbers for the bridge. Limestone in abundance, of good quality, for the piers, is found along the Suwannee near to the line, and the contiguous forests will afford the best of materials for the super-structure. The plan adopted for the Suwannee bridge is that of a first class counter braced arch and truss bridge supported upon stone masonry. Should the work be all made to conform to the plan and specifications, you will have a structure across the Suwannee that would compare favorably with any railroad bridge in the country. The site of the bridge (to cross the river at right angles) was well selected. The natural formation is such that the foundation for one pier alone has to be effected in water, the abutments being on land beyond the line of low water, where dry excavation down to a solid rock foundation is ascertained to be practicable. The contractors are preparing timbers for the trestles near the Suwannee. The trestle work across the Ocilla river is already completed—400 feet in length.

The work now remaining to be done upon the section in Madison will probably be reduced by the 1st of January, to the unfinished sections to the East of Madison Court House, and of this the most of it will be embraced in those sections which were let last during this year, near to the Suwannee; the construction also of some wood drains, and the work for the Hickstown Honds, which is an inconsiderable undertaking. The force engaged on the works through Madison is 63 hands and 27 carts.

In Jefferson county, a number of drains and some trestling remain yet to be built. These were to be all done, according to agreement, by the contractors for the grading. The drains, &c., which have been put in thus far, are built of good materials, well put together, in a creditable manner. More work on the grading through Jefferson would appear done at this time but for the delays consequent upon the storm of last September, which damaged the works in progress materially, and much time was expended on the repairs thus rendered necessary, and so interrupted the progress of the regular grading. At the close of the year several sections will yet be in an unfinished state; but the road-bed will be prepared by the time the track comes to be laid. The force engaged on the works through Jefferson is some 70 hands and 30 carts.

The contract is closed for continuing the super-structure, complete, in readiness for the trains from the head of the road. The track is to be formed at the rate of six miles a month, including the supplying of cross ties, except upon those sections through Madison, which the company may see fit to let to other parties to fill with ties. There are ties enough distributed at this time to lay some three miles, and the contractors are to be notified when to proceed to fill out the line. To ensure a supply of ties simultaneously with the track laying, will require a force in the woods of some 60 hands, besides those with the teams. It is clear, therefore, that this work of supplying the ties ought not to be any longer deferred in the present advanced state of the grading, in order that the ties may be kept in readiness some distance in advance of the track laying, and so that both may be pushed forward with rapidity and without fail, upon the arrival of the iron, &c.

The estimated quantities in grading to the East of Tallahassee, under contract 31st October, 1857, amounted to.....1,346,931 cub.yds.
Since then the remaining sections in Madison..... 54,505 "
And the line through Columbia County.... 449,884 "

Have been let making in all.....1,851,320 "
Reported done, 31st Oct., 1857.....998,319
Done during the year.....367,157-1,365,476 "

Remaining to be done 31st Oct., 1858..... 4-5-44 "
Alligator, of which, in Jefferson Co.... 59,855 "
In Madison..... 63,105 "
In Columbia..... 371,884 "

The grading remaining to be done is, much of it, light work, through sandy soils, easily excavated.

The work of grading on the Monticello branch was begun in ———, with 12 hands and 5 carts.

The quantities in excavation and embankment are..... 78,860 "
Done during the year, say..... 40,960 "

Remaining to be done, 31st Oct., 1858, some 38,000 "

The entire force employed upon the road at different points is, 231 hands and 51 carts.

Selections have been made at suitable points along the line, for the situation of depot grounds for the succeeding "stations" beyond Walker's Mill as far as the town of Alligator. Some important points are secured, deeded and recorded, and for the others, with one exception, an understanding exists with the parties owning the lands, as to the terms of relinquishment. The signing of agreements is merely postponed.

The last of the iron. &c., has been laid, forming a track that extends for the distance of 25 miles and upwards, (inclusive of three passing places.) Two water stations are established at intervals of 12 miles, and your three "stations" are provided with commodious freight houses.

The grading of the first 24 miles of the road (now finished and in operation) was unusually heavy and more expensive than this branch of the whole work will be on the remaining sections; and now, all expenses counted in, the actual cost to the mile is less, on the average, than by the original estimate; and it is thus ascertained that your road will be built at a cost that will not exceed the original estimate, and at less cost than any road in the South.

The trains commenced their trips through for business, and are running now regularly as Station No. 3, some 24½ miles out from Tallahassee, and by means of a connection with the Tallahassee Railroad, they traverse daily, a continuous line of nearly 50 miles to or from the gulf port of St. Marks. Among the equipments are one new locomotive engine, a passenger car, and 30 capacious eight-wheel box and platform cars, (22 on the road and 8 nearly ready,) all built at Tallahassee, of the best materials, in a skillful manner, and costing no more than imported cars. These with the occasional use of the "stock" in use on Tallahassee Railroad, (2 engines and 12 cars,) will be all-sufficient for present purposes.

Under the able management of your careful Superintendent, the business of the road has been conducted with marked success, regularity and economy, and the receipts from transportation evince already that stock in this road will be a paying investment.

From the head of the road to Alligator, the distance is 82 miles. The side lines will measure some two miles more, and the Monticello branch and its side lines, &c., about 5 miles, making in all, about 89 miles of track for which cross ties and the iron and spikes, &c., have to be supplied, and the frogs and gates, &c., at 12 switches.

I remark with satisfaction upon the careful manner generally in which the work upon the

road has been done. Our home contractors, the planters residing near the line will soon have accomplished the grading of nearly 70 miles of road, at cash prices, for railroad stock and the county bonds alone; and yet, without exception, they have worked as faithfully, as if working for cash. The road bed is well graded, and no disputes or disagreements have occurred respecting the work, nor about the terms of settlement, in any one instance. So nearly through as most of them are, it is only fair to wish them better bargains on future contracts.

The contractors for the work on the Suwannee bridge, and through Columbia county, claim to have had a large experience on public works, and speak confidently of completing their contract in time, and that they will lay more than six miles of track a month, with ease. They promise to augment the force to 100 hands on the grading early in January. With such a force steadily maintained, they would be able to finish the grading within 10 months; and with a proper force at the Suwannee on the bridge, it would seem as if a reasonable hope may be entertained now that the road bed for the entire distance to Alligator will be prepared at an early day.

I am informed that the track is laid for 12 miles out coming from Jacksonville. 2,000 tons more of iron is secured for their road, which will complete that road some 33 miles. They lay down the iron four miles a month. Admitting that they meet with no interruption in the delivery of iron or track laying till they arrive at Alligator, they will be at Alligator in 12 months, or about the time specified in the contract for our road through Columbia to be all finished in readiness for the trains as far as to Alligator.

In consequence of the stock subscriptions recently handed in by citizens of Gadsden county, providing means for the extension of the road to the west of Tallahassee as far as to the town of Quincy, and in order to accommodate their views, if it is practicable, to place the depot nearer to the court house than it is found located upon the route selected last year, a locating party was immediately organized. They have been thus employed during the past two weeks, on the surveys for the proposed revision. The field work has not advanced far enough as yet to warrant an opinion as to the feasibility and cost of the proposed alterations. The party will continue at this work until it can be clearly ascertained that the wishes of the citizens of Quincy can be accommodated or not.

L. W. DUBOIS,
Chief Engineer.

CITY RAILROADS.

The Boston "horse roads" are in number with an aggregate length of 31 miles, with 8½ miles double track, nearly 40 miles. The longest is 4½ miles, and the shortest 1½ miles. The total cost is as follows:

Road.....	1,292,973
Equipment.....	602,828

Total cost 12 roads, 40 miles.....\$1,895,701

The earnings of these roads in 1858, were \$148,609, and their working expenses \$438,553, and dividends 8@10 per cent. on those which paid. If we compare the leading roads with those of New York City, we have results as follows:

	Miles.	Cost.	No. Pas'gers.	Receipts.
2nd Avenue.....	9	426,322	4,867,371	\$248,368
3d ".....	6	1,170,000	8,105,515	403,375
4th ".....	6	711,000	2,014,466	100,724
6th ".....	4	865,957	5,240,978	262,048
8th ".....	5	808,424	5,829,452	341,472
30	3,971,703	27,057,802	1,358,891	

Boston.	Miles.	Cost.	No. Pas'gers.	Receipts.
Metropolitan.....	7.27	444,947	4,525,169	\$255,795
Melrose.....	4.41	245,548	1,138,327	63,374
Union.....	6.95	495,765	1,754,201	154,718
Somerville.....	2.87	68,000	71,210	3,420
Dorchester.....	4.08	132,032	131,462	17,872
Total	24.58	1,353,323	7,640,369	526,280

The cost of the Boston roads is \$56,000 per mile, and of the New York roads \$130,000 per mile. The Metropolitan is a double track road three miles long, with branches making seven miles, and cost \$444,987—or \$64,000 per mile. The Sixth Avenue in New York is a double track road four miles long, and cost \$211,000 per mile. The Boston Road carried 4,525,169 passengers at 6½ cents each, and the New York road carried 5,240,278 passengers at 5 cents each. Thus, at a much smaller cost the Boston roads charge a much higher price—more than 20 per cent.; but they run through a much sparser population. The enormous cost of the New York roads is undoubtedly a deception, but they pay a handsome dividend on that large cost. The Boston roads run into the neighboring villages over bridges and various outlets from the city, their operation being to spread the population into the country in all directions, improving the value of property on the whole circle. In New York enterprise has not yet succeeded in giving to the roads any other direction than lengthwise of the island. Long Island is as yet cut off from the city by the East River, and the most disgraceful ferry arrangements that could well be allowed to exist in the neighborhood of a great city. The time will come, however, when railroads will by tunnels give ready access to every part of Long Island. The Harlem and New Haven Railroads are now compelled to approach the city through a tunnel quite as dangerous and much longer than would be required to connect Brooklyn with New York, and permit the railroads which now run the length of the Island, to connect with the Brooklyn railroad, allowing the population to circulate freely as much easterly upon Long Island as northerly upon Manhattan Island. The wants of commerce as well as of population, will ultimately compel this improvement, and it will ultimately give immense fortunes to those who undertake it, as well as to the owners of real estate. The real estate movement now has been pushed to such an extent as to induce speculators to invest largely in real estate on the Jersey shore, west of the Hudson, in the hope that by the establishing of a middle ferry at 100th street, they may, by means of the railroads, afford cheaper rents to persons doing business in the lower part of the city, than can be had this side of the Central Park. Real estate in Brooklyn is very much depressed, and has been for years, because the experience of the public is that the ferry as now managed is too great a nuisance to be endured. That at Fulton street is by far the best, and that is scarcely endurable. The other ferries are destructive to the progress of the Island, which would, if traveled by railroads leading directly to the center of business, grow more rapidly than the upper part of New York. Boston, surrounded as it is by water, spreads equally to all points of the compass, since it is the distance from business, while other things less equal determines the locality of residence.—*Economist*.

We learn by telegraph and otherwise that all differences between the Old and New Companies, Southern Pacific Railroad, and the State have been amicably adjusted. The Old Company having been given possession of the road.

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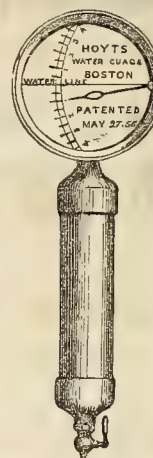
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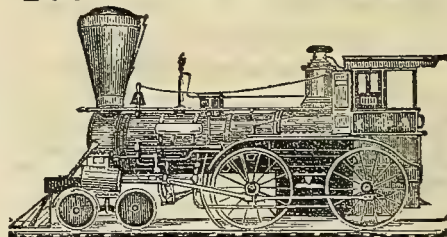
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President of the Board

Jan. 5th.

The Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

Thursday Morning, April 28, 1859.

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To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

MONEY MATTERS AND THE TRUNK LINES.

The money article of to-day's Evening Post says: A glance at the Stock list, and the advance and decline tables attached; furnishes some evidences of inactivity and indifference which have characterized the market for a fortnight past. The public look on, seemingly only to determine when the most favorable time for selling arrives, and the speculators of Wall street appear to have lost much of their energy. The little activity to-day was confined to New York Central and Rock Island. Sales of the former were principally in heavy blocks, at the prices of yesterday; the latter is less active, and about $\frac{1}{2}$ per cent. below the price of last evening. To-morrow the books of the Michigan Southern open. The closing bids are $34\frac{1}{2}$ @ $34\frac{1}{4}$. State Stocks and miscellaneous securities are without any noticeable change.

A dispatch in the morning papers, dated Baltimore, says: Mr. Garrett, of the Baltimore & Ohio Railroad, and Mr. Thompson of the Pennsylvania Central, have agreed upon a general reduction in passenger fares between New York and the entire West, of about three dollars. It is to be sustained by these two Southern roads, without division among the Western connections.—*Cin. Commercial*.

ARIZONA AND ITS MINES.

In the March number of the JOURNAL of the "American Geographical and Statistical Society,"—which, by the way, is one of those Journals, which men of science and letters ought to encourage,—is published the address delivered before that Society in February, by Lieut. Maury. This document contains much useful and valuable information. As that district now known as Arizona is rich in Mines, and very important in position, some information in regard to it may be interesting.

What is now known as ARIZONA is proposed to be bounded on the North by the parallel of $33^{\circ} 40'$; on the East by Texas; on the South by Texas and the Mexican States of Chihuahua and Sonora; and on the West by the Colorado River, which will separate it from California. It is seven hundred miles in length, and has an average width of one hundred and forty miles; contains about 100,000 square miles. If the reader will consult a map, he will find, that this Territory embraces much more than the Gadsden Purchase. That was wholly South of the Gila River, and West of the Rio Grande; while this, by running to the line of $33^{\circ} 40'$ and the West boundary of Texas, includes a large space North of the Gila and East of the Rio Grande. If Congress should establish the Territory, as proposed, this is important; as it will secure the whole valleys of these rivers within the territory.

Thus constituted, the Territory will embrace three of the largest rivers west of the Mississippi; the Rio Grande, the Gila, and the Colorado of the West. The Colorado is a navigable river, to a point within the Territory, and by opening into the Gulf of California, Arizona connects at once and easily with the Pacific Ocean. The natural outlet, then, is through the Mexican Province of Sonora; and we may as well take it for granted, that province will sooner or later be purchased and annexed to the United States. If so, it will be a separate territory.

Arizona, like all that portion of the American continent, was first explored by the Jesuits. In 1687, a Jesuit Missionary descended the Santa Cruz to the Gila. In consequence of his report, several Missions and settlements were established in that region, by the Spaniards. Of these, nearly all have perished. But, St. Xavier del Bac is still in existence—a mission church of great size and beauty, and magnificently ornamented. Most of these settlements were upon the San Pedro River.

The map of this Territory, made by the Society of Jesus, in 1757, contains the names and localities of an hundred silver and gold mines. These were occupied and worked; but the cruelties of the Spaniards towards the Indians—a system which they seem ever to have indulged in—at last roused a spirit of revenge in the Apaches and other tribes, which ended in driving out the Spaniards, and leaving the mines only of all these missions, as

the sad evidences of the feebleness of a civilization based on ignorance and oppression.

These mines have great value, however, in attesting and proving beyond a doubt, the correctness of the Missionary statements, in regard to the great number and value of the mines. Many of these have been re-discovered, and the shafts, furnaces, and ores found, prove that they have once been extensively worked, and exceedingly rich.

Quite as important a fact is, that there is sufficient arable land and water, if properly applied, to sustain the mining population. The account given of it, by explorers, correspond with the following from Mr. Maury:

The notes above referred to, in the possession of the writer, speak of great farming and grazing establishments scattered over the whole face of the territory, between 1610 and 1800, which produced abundant crops of cereals, fruits and grapes. These statements are confirmed by the testimony of Major Emory and his report, where he enumerates several of the most extensive—by Gray, Bartlett, Parke, and Colonel Bonneville. Many of the ranches, deserted by the Mexicans on account of the Apache Indians, have upon them large, well built adobe houses, which must have cost the builders thousands of dollars. Many of these have been occupied under squatter titles by emigrants within the last few years. Of others, only the ruins remain, having been destroyed by the depredations of the Indians, or by the heavy rains of succeeding years.

The country east of the Rio Grande is a great plain, broken only by the Sacramento and Guadalupe Mountains. Except in the towns on the river, there is no population. The Mescalero Apaches have, until lately, made settlements unsafe. The establishment of Fort Stanton, and the activity of the United States troops, have, however, reduced this once formidable tribe in number and spirit, so that an early settlement of the fine country in the vicinity of the Sacramento mountains may be expected. A number of bold, clear streams, alive with trout and other fish; a good proportion of arable land, and an inexhaustible supply of oak, pine, hack-berry, and other timber, are here found. In the Organ Mountains, opposite the Mesilla Valley, there are silver mines of great value. One of these, the old Stevenson mine—now known as the Fort Fillmore mine—has been purchased by New York capitalists, and preparations are making to develop its undoubted wealth.

The Rio Grande valley, including the well known Mesilla, contains a large extent of unoccupied arable land, with plenty of water for irrigation. Lately the protection afforded by United States troops has enabled the people to cultivate in safety; and during the last year nearly 100,000 bushels of grain were raised in the valley, besides a large number of cattle and horses. It is worthy of remark, that the settlements here, although mostly Mexican, have been made since the United States acquired the territory, and that the lands are held under American title. The population is quiet, well behaved, and thoroughly American in feeling. It is estimated, and I believe, correctly, that at least 50,000 people can be settled on the Rio Grande within the Arizona boundaries, and there are many attractions for the farmer and stock raiser.

West of the Rio Grande the country is a succession of *mesas* or table lands, ascending

gently for nearly ninety miles to the Sierra Madre, and thence westward for five hundred miles, gradually descending until they reach the Gulf of California. This extensive plateau, south of the Gila, is broken by two well defined ranges of mountains, the Chir-aca-hui and Santa Rita, and by a number of isolated peaks, which assume something the form of a sugar-loaf, and are called by the Mexicans Picachos and Peloncillos.

The sun never shown on a finer grazing country than upon the three hundred miles west of the Rio Grande. The traveler has before him throughout this entire distance a sea of grass, whose nutritious qualities have no equal; and the stock raiser in January sees his cattle in better condition than our Eastern farmer his stall-fed ox.

Ninety miles west of the Rio Grande is the Mimbres river and valley. Passing over the dividing ridge of the Sierra Madre, with so gentle an ascent and descent as to make it almost imperceptible, you descend into a wide and beautiful valley, which, at no distant day, will support a large population. The banks of the river are covered with a fine growth of cotton-wood; and above the usual crossing for emigrants, wild grapes and berries are found in great profusion. The Santa Rita del Cobre copper mine, of ancient fame, and a little to the north-west of the Mimbres, has lately been re-opened by a capitalist, who has already begun to reap the reward of his enterprise. It is claimed that the superior malleability and ductibility of this copper must make the demand for it very great. The Mimbres river sinks before reaching the line of Mexico. Some statements which I have never been able to authenticate, make it flow in very rainy seasons, into Lake Guzman.

TUBAC, as our readers know, is the centre of the operations of our friends, the Sonora Exploring and Mining Company. The account of that locality, given by Mr. Maury, is as follows:

The town of Tubac, fifty miles south-east of Tucson, which now boasts a population of several hundred, was entirely deserted up to 1855, when it was re-occupied in part by the Sonora Exploring and Mining Company. They claim the town, and have given permission to a number of emigrants to occupy the old houses, and build new ones. Over what was once the towers of the barracks of the Mexican troops, now floats a banner bearing the arms of peace, a hammer and pick, the insignia of the company; and in the rooms beneath, which once echoed to the tread of the successful Apache fighter, are now sold the calicoes and cotton goods of Lowell, and all manner of Yankee notions. The great Heintzelman mine, the mines of Arivaca, Sopor and Santa Rita, are within a circle of twenty miles from Tubac.

Three miles from Tubac is the mission of Tumacacori. Its venerable walls now shelter political exiles from Sonora, and a few enterprising Germans; and its rich lands are cultivated by the American squatter. Twelve miles farther up the Santa Cruz is the Rancho of Calabazas, claimed as the property of the Gandara family of Sonora. The extensive buildings are occupied by American families; and the blacksmith's forge is installed in a room once dedicated to more delicate uses.

The Sonoita valley, which opens into the Santa Cruz, near Calabazas, is the only one in any degree protected by the United States troops. It is about fifty miles long, in no place exceeding a mile in width, and gen-

erally much narrower. When I passed up it to Fort Buchanan, the whole valley was golden with grain. On several of the farms two crops were raised last year, wheat and corn, wheat and beans, and other vegetables. The farmer during the past year found a ready market for his produce, his purchasers being the troops and the Overland Mail Company. This valley is almost entirely occupied by an intelligent and adventurous American population.

Other mines of very great value and richness are mentioned by Lieut. Maury.

The Wachupe mountain is believed to be inexhaustible in silver. The San Antonio and Patagonia mines, lately opened, promise a rich yield to their owners. One of these is of especial value, yielding, besides a large percentage of silver, 53 per cent. of lead, which is purchased by other companies to be used in getting out the silver.

Gold mines have been discovered on the Gila river and are now actually worked. Gold mines are not, however, so valuable in the end as those of silver and copper, which are more properly mines, and may be more steadily and uniformly worked.

Our readers well know that disregarding any prejudices or local feeling, and looking only to the best mode of making the Pacific road, and its readiest use, we have advocated the Southern Pacific Railroad. In addition to what we have said we give the following views of Mr. Maury:

The advocates of this route point to the significant fact that the mail from San Antonio to San Diego has never once failed in eighteen months of operation, winter or summer. The great overland mail makes its best time on the 32d parallel, and that portion of the route denounced as the worst, from El Paso west, has proved itself the best. Thirteen hundred miles by stage in December or January in less than eight days: Is there any other route on the continent where this can be accomplished? Not on the Salt Lake route. It is wholly impracticable. Not on the Albuquerque route, else Lieutenant Beale would not go into winter quarters. On the 32d parallel no winter quarters are necessary. It is useless to attempt to evade this question of climate on so extended a route. In addition, the 32d parallel is by far the most level, and has the most water at all seasons of the year. (See Lieutenant Parke's report.) The first terminus of the Pacific railroad will be Guaymas on the Gulf of California. From El Paso to Guaymas the distance is only about four hundred miles, at most four hundred and fifty. It will run across the Guzman valley through the Guadalupe or some more southern pass to Arispe, thence to Ures, thence to Hermosillo, thence to Guaymas. It will traverse a rich agricultural and mining country, and can connect with San Francisco and all the Pacific by steamers. A branch from Arizona down the valley of the San Ignacio would give Arizona the outlet she so much desires for her productions. It connects with the Texas road at El Paso, and, notwithstanding all the predictions to the contrary, the Texas road will be built. Should it be deemed desirable to extend at once to the Pacific, a steam ferry across the Gulf of California, and short railroad across lower California,

to a roadstead on the Pacific, accomplishes the desired end. If these views were elaborated, they could be supported by an array of evidence not to be overthrown.

EXPORTS OF GRAIN TO FOREIGN COUNTRIES.

The gradual demand of Europe for more bread, founded on the constant change going on in the direction of Industry, is producing its effects on the exports of bread stuffs from the United States. The change of industry in Europe is, in a continual diversion from agriculture to the arts. Each year increases the number of inventions, and consequently the number of those employed in the arts. The natural result follows; relatively less crops. The great countries of Europe, which used formerly to produce a surplus of agricultural products, now scarcely produce enough for their own consumption, in ordinary seasons, and never in bad years. The most conspicuous of these nations is Great Britain, which imports every year; but sixty years ago, exported grain. France is about balanced; in good seasons exporting, and in bad ones importing. On the whole, Southern Europe about maintains its own, while Russia and Poland are exporting countries.

The following is a statement of the exports of the United States for twenty-one years:

	EXPORTS.	
	Bushels.	Value.
1833.....	2,247,696	3,617,024
1839.....	4,712,086	7,069,361
1840.....	11,198,365	11,779,098
1841.....	8,447,670	8,582,527
1842.....	7,237,968	8,292,308
1843.....	4,519,055	4,027,182
1844.....	7,751,587	7,232,898
1845.....	6,365,866	5,735,372
1846.....	13,061,175	13,356,644
1847.....	26,312,431	32,153,161
1848.....	12,764,669	15,823,281
1849.....	12,309,972	13,287,629
1850.....	8,658,982	8,817,015
1851.....	13,948,499	13,303,332
1852.....	18,680,646	14,424,332
1853.....	22,379,126	22,687,200
1854.....	28,142,595	40,421,616
1855.....	6,820,584	12,226,154
1856.....	25,708,007	44,590,809
1857.....	33,730,596	48,123,318
1858.....	26,487,041	28,390,388

Dividing twenty years into periods of five years each, we have this result:

	Bushels.	Value.
1854-'58 inclusive.....	120,894,823	\$173,252,285
1849-'53 ".....	75,977,264	79,519,538
1844-'48 ".....	66,255,728	74,563,339
1839-'43 ".....	36,115,144	42,750,476

This table proves two very important facts, viz.:

1st. That the quantity of bread stuffs imported from this country is constantly increasing.

2d. That the price on the whole is advancing. The ratios of this increase and advance stand thus:

	Bushels.	Price.
1839-'43.....	increase.....	\$1 16
1844-'48.....	.85 per cent.....	1 12
1849-'54.....	.15 ".....	9 1
1854-'58.....	.60 ".....	1 45
Total 1839-'58.....	.230 ".....	.25 per cent.

In this period of twenty years, there have been great fluctuations; but, the result shows unerringly the tendency of things. Europe

will continue to demand more bread, and the United States will furnish more. There seems to be no reason to the contrary. At \$1 00 per bushel of wheat, farmers can afford to raise it for exportation, and will do so. But, we see, that for three-fourths of twenty years, wheat has been above \$1 00 in the general markets. The United States at this time can not average a surplus for foreign markets of more than *thirty millions* of bushels of wheat; but, the surplus of Indian Corn is almost indefinite, for the amount of land on Indian Corn may be greatly increased.

The principal foreign countries to which bread stuffs were exported in 1858, were as follows:

GREAT BRITAIN—Flour, bbls.....	1,041,736
Wheat, bush.....	5,788,200
Indian Corn, bush.....	2,815,198
BRITISH AMERICA—Flour, bbls.....	1,013,717
Wheat, bush.....	2,29,361
Corn, bush.....	922,324
BRAZIL—Flour, bbls.....	525,120
Corn, bushels.....	53,159
SPAIN—Flour, bbls.....	229,770
Wheat, bush.....	228,361

Three-fourths of all the exports are to these countries, and we see that the amount is very great. In a single year, Great Britain, Spain, and Brazil have taken *twenty-six millions* of bushels of grain from this country, and this brought thirty millions of dollars. A very few years will double it.

PACIFIC RAILROAD OF MISSOURI.

We are indebted to the officers of this company for their Annual Report, bearing date, December, 1858, from which we gather, that the total length of the main line, when completed, will be 282 miles, extending from St. Louis to Kansas City. There is now completed of the road 163 miles, from St. Louis to Tipton, with a prospect for the early completion of the balance. The earnings of the road for the year ending November, 1858, were:

From Passengers.....	\$320,791 44
" Freight.....	296,580 70
" Mails.....	19,139 60
Total earnings.....	\$636,511 74

The receipts from earnings of the road from the commencement of operations, to November 30, 1858, were:

From Passengers.....	\$1,060,282 70
" Freight.....	754,431 78
" Mails.....	45,378 16
Total receipts.....	\$1,859,692 64
The transportation expenses during that period were.....	\$1,147,027 65
Expenses of Gasconade disaster.....	21,757 76
Cars destroyed and rebuilt.....	7,374 94
Total.....	1,176,160 35

Net earnings to November 30, 1858..... \$683,542 29
The interest charged to transportation department during the same time was..... 834,455 87

Showing a deficiency in 1858, of.....	\$150,923 56
In 1857, the deficiency was.....	179,690 03
In 1856, " " ".....	88,667 50
In 1855, " " ".....	44,348 51

The total amount subscribed to the capital stock of the main line is \$3,804,400. The amount collected \$3,145,470 25. The net proceeds of which, (after deducting \$189,332 50 for discounts and commissions on St. Louis city and county bonds, received in payment

therefor, and \$33,825 for commissions for collecting subscriptions west of Jefferson City,) is \$2,923,012 70. The amount of State bonds authorized for the main line is \$7,000,000; the amount issued to the company, \$6,780,000; the discounts and commissions, \$753,593 11. The net proceeds, \$6,026,405 89. The amount due the company the first of March was \$220,000.

The cost of the Road, to Jefferson City, exclusive of rolling stock and general expenses, is stated at \$5,974,953 75; the gross cost of the road to that point is \$7,542,353 73; the total amount expended on the main line, including discounts, commissions, etc., is \$10,033,823 05. The estimated cost of the Road from Jefferson City to Kansas City is \$4,514,000; the additional means required for that purpose the board estimated at not less than \$3,500,000. The gross cost of the work done west of Jefferson is \$1,717,051 70. The gross cost of the rolling stock is \$774,417 50. The whole amount of debt due and to become due by the company, on the main line, exclusive of bonds, is put down at \$478,232 29. The whole amount due and to become due to the company, exclusive of unpaid instalments on stock, is \$406,576 26—of this sum \$68,045 11 is in litigation. The value of the remainder, the board has no means of estimating. The amount of interest to be paid by the company on State bonds and Free Land bonds on the main line is \$408,410. The annual interest on the State bonds now issued is \$406,800—on the whole amount authorised, \$420,000.

The following statement of the estimated cost and progress of the work upon the main line from Jefferson City west, is extracted from a report made by the Chief Engineer to the Board of Directors in October last. The estimates are full and include graduation, masonry, bridging, superstructure, ballasting, fencing, buildings, etc.:

	Work done.	Remaining to be done.	Total cost.
To Tipton.....	\$1,181,918	\$92,682	\$1,275,000
Ottumville.....	121,369	292,631	414,000
Sedalia.....	10,260	259,740	270,000
Knob Noster.....	6,727	419,273	426,000
Warrensburg.....	20,037	352,962	373,000
Kingsville.....		606,000	506,000
Pleasant Hill.....		298,000	298,000
Independence.....		642,000	642,000
Kansas City.....		330,000	330,000
Total.....	\$1,340,311	3,173,689	\$4,514,000

The following is a brief statement of the quantity, condition, value, etc., of the lands donated to the State, for this company, by act of Congress passed June 10, 1852:

For main line—1st division.....	127,000 acres.
" South West Branch.....	1,040,000 "
Total.....	1,167,000 "

The former are free lands—not being subject to the mortgage to the State under the act of the General Assembly of December 10, 1855. These lands are situated in St. Louis, St. Charles, Jefferson, Washington, Franklin, and Crawford Counties; and embrace a large quantity of fair agricultural lands, a portion of the Pine lands of Washington county, and overlay one of the most varied, extensive, and richest mineral regions in the State—lead, copper, and iron all being found upon them in large quantities. Of these lands, 1,225 acres have been sold—the greater portion of which was purchased under the pre-emption rights at \$2 50 per acre. The value of the remainder is put down in the report of the Company's Land Agent at \$5—equal to \$628,875. On these lands there has been created a mortgage to secure the payment of \$600,000 of "Free Land Bonds." Of these bonds, \$373,000 have been used by the Company; \$250,000 are hypothecated to secure the payment of \$136,000 for iron purchased in 1856;

\$23,000 were sold to private individuals; and the remainder, \$227,000 are still in the possession of the company—the total incumbrance upon the free lands is, therefore, \$159,000. These lands have been recently examined, and are now being classified preparatory to being sold.

The portion applicable to the South West Branch are valued at \$10,425,000, and consists of agricultural, pastoral, timbered and mineral lands—extending the entire length of the branch. Upon them are large bodies of prairies, interspersed with abundant timber, and well watered; also, forests of pine, and the most extensive and richest deposits of mineral that have ever been worked. These lands have been mortgaged to secure the payment of bonds, to the amount of \$10,000,000; to be issued under it. Of these bonds \$4,500,000 have been guaranteed by the State; and \$132,000 of the guaranteed bonds, together with \$1,268,000 of direct bonds of the State (in lieu of guaranteed bonds) issued to the company—making the whole amount of direct and guaranteed bonds received by the company for the use of the South West Branch \$1,400,000, and leaving to be drawn \$3,100,000.

The total amount of stock subscribed is \$356,000—of which \$65,973 has been collected.

The discounts, commissions and interest amount to \$308,249 27. The interest on State bonds now issued is \$76,080; on guaranteed bonds at 7 per cent., \$9,240.

The length of the South West Branch of the Pacific Railroad is 283 miles; nineteen miles are completed and in use, and forty-three more in progress of construction. The maximum grade, is 65 feet. The minimum radius of curvature at one point is 882 feet, upon a level grade. With this exception, the minimum radius, is 955 feet. The Chief Engineer is of opinion that a good road, with superstructure and buildings, can be obtained at the contract price, viz: \$7,621,680. The total expenditures on the branch to November 30, 1858, were \$1,442,710 36—the amount of debt due on the same, \$84,281 86.

CONDENSED BALANCE SHEET, NOV. 30, 1858.

	Dr.	
Capital Stock—main line.....	\$3,263,684 65	
Capital Stock—South West Branch.....	66,973 33	\$3,330,657 98
Bonded Debt—main line.....	\$6,503,000 00	
Bonded Debt—South West Branch.....	1,400,000 00	\$8,203,000 00
Premium received on bonds.....		71,594 30
Land grant sales and rents.....		6,498 23
Floating debt—main line.....	476,850 89	
Floating Debt—South West Branch.....	84,281 86	
Due R. Benson & Co.....	1,381 40	562,514 13
Total.....		\$12,174,264 66
Construction St. Louis to Jefferson.....	\$5,974,953 75	
" West of Jefferson.....	1,360,217 16	
" South West Branch.....	1,104,019 89	
Equipment.....		613,357 60
Interest, discount and commission, main line.....		1,961,400 09
Interest, discount and commission South West Branch.....		208,249 27
Office expenses, stationery, etc.....		132,694 45
Land Grant, including Geographical survey, South West Branch.....		30,450 20
Undistributed balances.....		54,835 18
Interest charged to transportation.....	\$834,455 87	
Less net earnings.....	6-3,532 29	150,923 58
Steamboat line balance of accounts.....		51 04
Bills receivable.....	\$162,445 18	
State B'ds issued for South West Branch.....	127,000 00	
Sundry accounts.....	132,229 86	
Bonds of town of Hermann.....	500 00	
Cash.....	49,746 41	491,911 45
Total.....		\$12,174,264 66

The officers of the company for the ensuing year are as follows:

JOHN M. WIMER, *President*.
EDWARD MILLER, *Chief Engineer*.
T. McKISOCK, *General Superintendent*.

GRAND TRUNK RAILROAD.

21 OLD BROAD STREET, LONDON, E. C.,
March 8th, 1859.

The undersigned London Directors of the Grand Trunk Railway of Canada, believing an erroneous impression prevails respecting its present and future position, and as the statutory constitution of the Grand Trunk Company requires the general meetings of the shareholders to be held in Canada, the Directors are anxious at the present time to lay before the proprietors, by this circular, a concise account of the present position of their undertaking, showing the amount of capital already expended and still required, the works which have been finished and those that remain to be executed, and to make some remarks on the present revenue and future prospects when the line is open to Sarnia and the Victoria Bridge completed.

The total capital set forth in the original prospectus, as necessary to complete the line, amounted to £9,500,000. The sum of £3,111,500 has been raised in bonds of the Province of Canada, the interest on which formed the first claim on the railroad. The remaining capital consists of the debentures and shares of the company.

Many circumstances arose, especially connected with the line between Montreal and Portland, which caused an expenditure not originally contemplated, and a junction of twenty-one miles in length has also been made between St. Mary's and London; but, on the other hand, the Canadian Legislature liberally consented to forego all claims for interest on the amount of provincial bonds above stated, until the original shareholders received 6 per cent.; and the eastern portion of the line has been curtailed nearly thirty miles, causing a saving of about £250,000.

The actual capital raised and expended to this date, on which interest is payable, is £8,426,000, which stands in the following order:

1st.	£2,000,000	Preference Debentures, 6 per cent.
2nd.	2,144,650	Ordinary " " " "
3rd.	1,500,000	7 per cent. " " " "
4th.	2,711,600	Consolidated Stock.

£8,426,200

And authority is to be asked for at the meeting about to be held in Canada, to raise the further sum of £1,111,500, by Second Preference Debentures, under the powers granted by the act of 1858, which sum, with existing assets, will be required to pay off present liabilities, and to open the whole line from Sarnia to Quebec and Riviere du Loup, and to Portland, a total distance of 1,057 miles, including the Victoria bridge.

The cost, therefore, of the railway to the shareholders, equipped with working stock, and including the bridge, will be about £10,000 per mile, a sum which the directors can not but consider extremely moderate, when it is remembered that all the works will be of the most substantial character, the bridges and viaducts being of stone and iron, that the Victoria bridge will cost £1,350,000, and that interest has been paid by the company during the construction of the works, to the extent of £1,200,000. The length of line now opened is 880 miles, and by October next, the bridge and the extension to Sarnia, of seventy miles, will be ready for traffic; and at the same time

a railway in the State of Michigan, between Port Huron, opposite to Sarnia, and Detroit, fifty-five miles in length promoted in the interests of the Grand Trunk Railroad, and to be worked by it, will also be open.

The position of this latter railway must insure to its own shareholders a highly remunerative return, whilst its importance to the Grand Trunk can not be over-estimated, as it completes the link with all the American railroads extending west and south, thus forming a continuous line between Chicago and the eastern seaports of Quebec and Portland.

It now remains for the Directors to examine into the extent and character of the traffic already obtained, to compare it with that calculated upon in the prospectus, and thus to enable the shareholders to form their own opinion as to the future.

The traffic to the present time has been almost entirely local; but it is most gratifying to find that the receipts upon the portions of the line now open, 880 miles, have already exceeded the total amount originally looked for from that source over the whole length of the road, and this traffic is evidently increasing. The gross amount calculated upon in the prospectus was £460,000 on 1,112 miles, or at the rate of £8 per mile per week. The sum actually received in the two years, 1857 and 1858, has been at the average rate of £11 per mile per week upon the whole distance as opened.

In regard to the through traffic, the directors can see no reason for doubting the accuracy of the original calculations. The vast trade of the west has greatly increased during the last few years, as likewise the exports and imports, and the population of the Province of Canada. A regular line of steam packets between Quebec and Portland and Europe, shortly to form a weekly communication, has been established. The Grand Trunk will thus form the best route to the Western States of America, and the Red River settlement or the Hudson's Bay Company, and ultimately to British Columbia.

At the close of this year, when the junction between the Grand Trunk and the various railways in the State of Michigan has been effected at Detroit, the advantages offered by the Grand Trunk for the conveyance of the Western produce to the Eastern ports, a distance of 800 miles, without break of gauge, must attract to itself a large share of this traffic; and with the view of forming an opinion of its extent, the directors have examined the gross revenue actually obtained on the four principal lines, which have hitherto transported a large proportion of it, and it appears that, taking the total receipts during the two years, 1857 and 1858, the latter being one of the great commercial stagnation, the average amount received per mile per week has been: on the Michigan Central, £31 4s.; on the Great Western of Canada, £32 6s.; on the New York and Erie, £46 10s.; and the New York Central, £49 16s.; the average of these four lines exceed £40 per mile per week.

In addition to a share of this vast trade, to obtain which the Grand Trunk is in a most favorable position, it will derive additional traffic from the produce brought by the Lake navigation, and intercepted at Sarnia, where ample provisions will be made for its reception and transport.

With these facts before them the directors have every confidence that the very moderate estimate of £30 per mile on the Western, and £20 on the eastern half, making an average, on the whole line of £25 per mile per week, from the local and through traffic combined

will be realized, and also that the working expenses under these circumstances will not exceed 50 per cent. of the receipts.

On the portion of the line West of Toronto, already opened, the local receipts for the last few months exceeded £20 per mile per week, and the working expenses have been less than 50 per cent.

Assuming that the total capital on which interest will have to be paid may in round numbers be £10,000,000, the result will be as follows:

£25 per mile per week on 1,057 mls.....	£1,374,100
50 per cent. for working expenses.....	687,050
	£687,050
Deduct Rent on Portland section.....	73,000
Leaving a net profit.....	£614,050

—or more than sufficient to pay six per cent. on the whole debenture and share capital of the company.

Under these circumstances the London Directors, in offering, without reserve, their views on the position of the Railway, feel that the Board have adopted the best and most equitable mode of raising the necessary funds by the proposed issue of £1,111,500 Second Preference Debentures, which, with the £2,000,000 of First Preference already insured, assume the position originally occupied by the Provincial Debentures of £1,111,500.

As soon as the London Directors have received from Canada the information that the requisite sanction has been given for this issue, they will announce the arrangements they propose to make for the disposal of the debentures.

THOMAS BARING, *Chairman*.
GEORGE CARR GLYNN,
KIRKMAN D. HODGSON,
H. WOLLASTON BLAKE,
WILLIAM CHAPMAN.

BELLEFONTAINE RAILROAD.

The line popularly known as the "Bellefontaine" is made up of the Bellefontaine & Indiana, and the Indianapolis, Pittsburgh and Cleveland roads, extending from Indianapolis to Crestline, 206 miles.

The annual report of the first named road, recently issued, states that the business of this road shows a decrease, as compared with 1857, in passenger and express earnings, and an increase on freight traffic. The reduction of working expenses, when taken into account, presents an increase of net earnings over the previous year. The figures are as follows:

BUSINESS FOR THE YEAR 1858.

Earnings—From passengers.....	\$114,564 00
From freights.....	194,525 53
From mail.....	17,850 00
From express.....	7,287 17
Total.....	\$332,226 70
Working expenses.....	\$185,414 24
Interest on bonds.....	90,328 00
Taxes.....	8,262 11
	\$384,004 35

Balance net..... \$48,212 35

The working expenses are a fraction over 56 per cent.

COMPARISON WITH PREVIOUS YEAR.

Earnings for year 1857.....	\$348,351 83
Earnings for year 1858.....	\$332,226 70

Decrease in 1858..... \$16,125 13

Which is divided as follows:

Decrease on passengers.....	\$30,047 07
Decrease on express.....	2,982 95

Total.....	\$33,030 02
Increase on freight.....	16,904 89
Working expenses of 1857.....	237,515 59
Working expenses of 1858.....	185,414 24

Decrease in 1858..... \$42,101 35

Deduct decrease of earnings.....	16,125 13
Net increase for 1858.....	\$25,976 22

Except what is termed the Car Loan, explained in the last report, the Company has no floating debt.

An arrangement to extend the Income Bonds due 1st February 1859 to 1870 has been made, and a sinking fund of \$20,000 per annum established for them. The Directors recommend another sinking fund for the bonds due in 1866. The apparent earnings of the road are about 3½ per cent. on the stock.

The gross earnings of the Indianapolis, Pittsburgh and Cleveland Railroad for 1858 present about a corresponding decrease with those of B. & I. The figures are as follows:

BUSINESS OF THE YEAR.

Earnings—From passengers.....	\$99,740 09
From freights.....	115,295 93
From mail.....	12,750 00
From express.....	5,189 43
Total.....	\$232,965 45
Transportation expenses.....	\$134,069 14
Interest and Taxes.....	72,364 13
Interest and cost of floating debt..	2,746 74
Ballast account.....	5,977 22—\$215,157 23
Balance net.....	\$17,748 22

The working expenses proper are a fraction over 57 per cent., with nearly 50 per cent. of gross earnings from freight transportation, at, during a portion of the year, very low rates.

The account of bonds and stock on the 1st of January, 1859, stood as follows:

First mortgage bonds.....	\$656,000
Second mortgage bonds.....	169,500
Income bonds.....	166,500
Domestic bonds.....	34,200—\$1,025,200 00
Capital stock.....	835,971 26
Total bonds and stock.....	\$1,861,171 26

FLOATING DEBT.

The amount of floating debt reported as due the first of January, 1858, was.....	\$34,578 85
Amount 1st of January, 1859.....	19,718 65
Reduction during the year.....	\$14,860 20

Of the amount due 1st of January, 1859, the sum of \$3,194 59 had since been paid, leaving floating debt at this time \$16,524 06. Three hundred thousand dollars of the First Mortgage Bonds will mature 1st of January, 1860, of which \$30,000 are in the Sinking Fund. These bonds, it will be necessary to extend.—*Commercial.*

LONG ISLAND RAILROAD CO.

A condensed comparative statement of the operations of the road, the receipts and expenditures is given below for the past three years:

	Year end'g 31st March, 1857.	Year end'g 31st March, 1858.	Year end'g 31st March, 1859.
Passengers carried:			
To and from Brooklyn.....	254,976	237,909	232,350
Way.....	45,215	47,668	41,856
Commutation passengers 77,333	95,666		97,962
Total.....	377,524	381,243	372,168
Miles run by the trains:			
Passengers.....	138,779	146,484	147,648
Freight.....	76,854	66,009	81,887
Total.....	215,633	214,493	229,535
The receipts have been as follows:			
Passenger fares....	\$190,805 52	\$193,277 13	\$189,988 36
Freight.....	106,695 03	119,715 64	130,054 47
Unloading Freight..	2,115 95	4,107 44	5,004 12
Mails and other sources.....	8,767 91	8,021 92	8,991 18
Total.....	307,744 41	325,113 13	334,038 13
The expenditures have been as follows:			
Conducting operations of the road..	\$263,431 14	\$186,710 73	\$180,514 57
New equipments and new eng. houses..	12,060 93	9,106 72	658 00

Interest paid.....	34,965 13	33,499 40	32,920 00
Rent of Brooklyn & Jamaica and Cold Spring Branch R. R.'s and depot at South Ferry.....	39,394 64	39,810 15	41,334 62
Total.....	\$29,871 84	269,127 00	255,427 19
Receipts as before stated.....	307,784 41	325,313 13	334,038 13

Net surp's after paying all expenses, rent and interest, and equipment, as above.....	\$17,912 37	\$56,186 00	\$78,610 94
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The result of the past year's operations shows a larger surplus than any previous year, and this has been secured at a time when the receipts from the passenger business of the Road show a falling off. It is, therefore, to be attributed to the increase of the freighting business of the road, together with strict economy in the administration of its affairs.

It may be proper here to enlarge a little upon the—

FREIGHT BUSINESS.—It is to be observed that the freight business is increasing from year to year with more certainty and greater rapidity than the passenger business. While the latter fluctuates from year to year and sometimes remains stationary for several years, and occasionally recedes, the freight business has regularly shown an increase every year since 1852. A few years since the passenger earnings were fully \$100,000 more than the freight earnings. The past year shows but \$60,000 difference. A reference to the statements of the receipts in table No. 8, will show fully the ratio of increase. While increased facilities have been given year by year to the passenger business, some efforts have also been made to foster the freight business.

No milk was transported on this road a few years ago; but, by running an afternoon train for milk during warm weather, and also a Sunday train for milk the year round, and keeping the freight at a moderate rate, viz: half a cent. per quart, the milk is rapidly increasing, and will soon become quite an important item in the operation of the road.

Last year there were delivered in Brooklyn, chiefly from points between Brushville and Syosset, 3,221,158 quarts of milk, paying, at half a cent per quart—

The sum of.....	\$16,105 79
There was also sent from Brooklyn, feed for cows, paying freight of.....	2,407 70

Total receipts from milk business.....\$18,513 49

There are various kinds of freight that are just commencing to yield a revenue; among which may be enumerated peaches, blackberries, and other small fruits, and garden produce generally.

The chief markets to which the farm and garden produce of the Island have heretofore been transported are in New York City; and to reach these markets, the farmers, for about twenty-five miles distant from New York, even close to the route of the railroad, have been accustomed to use their own teams and wagons, mainly because their was no direct mode of delivering their produce at the markets in New York, if the railroad was used to Brooklyn.

To obviate this difficulty, the railroad company have made arrangements to have a market barge run in connection with the road, to carry the farm produce, immediately on its arrival at South Ferry, across to New York, to Washington Market.

By much consultation with gardeners and farmers along the road, it is believed that the result of this experiment will be quite satisfac-

tory. The erection in Brooklyn, near this railroad, of suitable public markets, would be the means of adding business to the road, and be an annual saving of large sums to the citizens of Brooklyn.

The quantities of sundry articles of freight transported over the road during the past year are shown in table No. 10.

During the past year there have been three meetings of the stockholders of this company, held mainly with a view of considering the propriety of changing the terminus of the road from its present location at South Ferry, Brooklyn, to Hunter's Point. After full consideration of the subject, and some modification of the terms proposed, at the last meeting the plan was unanimously approved. Since that time, the Board of Directors have entered into a contract with E. B. Litchfield, Esq., of Brooklyn, representing the Atlantic street people, to carry the plan into effect.

Annexed hereto will be found a map of the proposed route, together with a circular published at the time of the stockholders' meeting, giving full explanations on the subject.

The railroad company are prepared to carry out the contract, and Mr. Litchfield and those acting with him are confident that he will be able to comply with his part of the contract within the time agreed, viz:—during all the year 1859.

But if by any cause the proposed change should be prevented, the agitation of the subject, and the immediate prospect of the business of Long Island now upon the railroad being chiefly directed away from the city of Brooklyn, has aroused the attention of the citizens of Brooklyn, and brought to light a strong feeling in favor of the continuance of the railroad at its present terminus; and we believe that many advantages will result to the company from the discussion of the subject.

At one of the meetings of the stockholders, a resolution was passed, desiring the Directors of the company to consider the propriety of establishing a transfer office in Philadelphia, this subject was referred to a special Committee, who, after full examination and deliberation, reported against establishing it. In which report the Board of Directors unanimously concurred.

But to meet the immediate object of the proposed plan, the President and Secretary of the company opened, during one day, at Philadelphia, a transfer office.

In the event of another stockholder's meeting being held at Philadelphia, where important questions would be submitted, the same plan might again be adopted—thus avoiding the great objections to which the plan of a branch transfer office is liable, and at the same time meeting the chief object of such office.

Fully to keep up the passenger cars upon this road, the Board have ordered the purchase of three new first class passenger cars. They are to be delivered in June next. * * *

By order of the Board,

WM. E. MORRIS, President.

April 1st, 1859.

A CHILIAN REVOLUTIONARY GOVERNOR ON A RAILROAD.—The Panama correspondent of the N. O. *Picayune* tells the following story:

"A friend from Chili, an American engineer of high character, relates to me some incidents connected with the revolution there, one, of which he was an eye witness, well worth relating. I wrote you in my last that President Montt had dispatched the twenty-two gun ship Esmeralda to Caldera, with 350 troops, to put

down the movement at Copiapo. On dropping anchor in the port, the commander of the Esmeralda discovered a man very composedly sitting on a fine horse, close to the landing, intently watching the ship. Rightly divining that this personage was the revolutionary Governor of Caldera, and wishing by all means to prevent the news, of the arrival of the troops from reaching Copiapo, the Esmeralda at once sent four boat loads of armed men to the shore, with orders to prevent the starting of the locomotive, which, it was perceived, was firing up. As the boats neared the beach, the engineer ran for his life, but the Governor jumped on to the locomotive. Presently, as the shots from the government rifles dropped like hail around the iron horse, he gave one defiant snort, and started, like the wind, on his course, breaking the feed-pipe, which was supplying the machine with water. The Governor continued his break-neck course for about fifteen miles, when, the water being exhausted, he ran the locomotive partly off the track, in such a manner, that great delay must be experienced in getting it on again. A hand car being near at hand, he hopped on to it, and propelled it for the distance of about two miles, when he took up several rails and buried them deeply in the sand. A couple of miles further, and buried more rails—and so on, burying rails until he had run the whole fifty miles to Copiapo. In a day or two after, the 350 Government troops, by repairing the road, managed to get as far as Monte Amargo, half way from Caldera. Then they advanced twelve miles further, where they were met by 80 of the revolutionists, armed with Sharpe's rifles, who compelled them to fall back to the Monte. The Governor had safely arrived at Copiapo, preventing his party from being taken by surprise. At the last accounts, President Montt's men were fortifying themselves, with every prospect of having to "cut dirt" as soon as a re-enforcement of Gallo's little force should come up."

RAILROADING IN INDIA.

A correspondent writing from Bombay, under date of January 19, says:

It was my rare good fortune to visit, some few days since, the great Bhore Ghauts—the mountain chain that forms the Backbone of Hindostan. Here, between the towns of Campoolu and Khandallah, a distance of some three or four miles in a straight line, but necessarily to be by railroad some fifteen, is being carried on to, I sincerely believe, a successful conclusion, one of the most stupendous works of the age—indeed, I might add of any age of the world. It is no less than tunneling the mountains through their entire breadth. Already the tunnels number some twenty-five, and are of lengths varying from one hundred yards to one quarter of a mile, and all through the solid rock. To give some idea, let me say, that the average height of the Ghauts here is from 2,500 to 3,000 feet above the level of the sea, and the town of Khandallah, the terminus of this arduous work, above Campoolu, its commencement, some 2,000 feet. The distance being fifteen miles, of course gives about an average grade of one in forty. Its greatest inclination in any one place is one in thirty-three. Already three years have been consumed, and I was assured that five more at least, would be needed for its accomplishment. The contract is for five years, at a cost of about £1,000,000 sterling; this must be exceeded at least three years, and if £2,000,000 cover the cost of the work they ought to

be satisfied. It is really a splendid sight; as you look from the top of some high point, the eye rests upon a little spot, dark and narrow, away off across yonder deep ravine, and opening into the heart of the mountain; about it are thousands of men and women running to and fro, and looking from this distance, like so many great black ants at work on some stupendous mound; pile after pile of solid masonry is being built across from hill to hill—massive walls are being erected to prop the sides of mountains—splendid bridges and roads, as firm as the very rocks upon which these mountains rest—and all this Titan work done by these same half-naked, dusky savages. No modern improvements for them; no boring machines for their hands—with the same instruments that their fathers' fathers used, they are now hard at work. I could not help thinking, as I saw at one place a lot of coolie women engaged in the work of building a road upon the side of one of the hills, by filling up a ravine—which lay smiling and happy some thousands of feet below—with a basketful of dirt at a time (a basket which held only a few handfuls of earth), of the beautiful coral islands of the sea, and how they were builded, not by loads of earth, and stone, and rocks, but by specks. It is not the least interesting feature of this great work that the mind of a few should have triumphed over the matter of so many thousands, and with such miserable materials bring to a successful conclusion one of the greatest undertakings of at least the nineteenth century. In one place a bridge is being stretched across from one hill to another, on piers of solid masonry, which will measure at an average four hundred feet in height. Think of a dozen monuments like Bunker Hill, and a train of cars running over their tops, and you have some faint idea of one of the mighty structures of the G. I. P. Railway Company at the Great Bhore Ghauts.

Some very rich specimens of minerals are turned out daily, and one with a little care can make as fine a collection as from any trap rock neighborhood in the world. I was fortunate in procuring excellent specimens, and hope at no distant day to have the pleasure of adding a little to your valuable collection at home.

WHALING IN THE UNITED STATES.

Mr. Ringgold, United States Consul at Paita, in the Pacific, has issued a report on the condition of the whaling business of this country, which is of general interest, and we extract portions of it for the benefit of our readers:

From after the war of 1812 we may date the commencement of American whaling in the Pacific. Commodore Porter, in that erratic yet bold expedition in the Essex, by destroying the English whale fleet on this side of land, gave the impetus and laid the foundation to a vast trade, which the Eastern States, with their characteristic energy, and especially Massachusetts, eagerly grasped, and from which they have reaped millions of profit.

At that period I doubt whether there would have numbered more than ten or twelve American whalers in this ocean. But at the close of the war English capitalists on this branch, having either been ruined or fearing to again entrust their vessels so far from home, and for so long a time, left the Pacific free, and consequently the American trader found this immense space entirely at his disposal.

For many years so successful were the voyages, and in comparatively so short a space of

time were they performed, that nothing but old condemned merchant vessels patched up, sometimes newly rigged, with the necessary boats, and whaling gear, were sent to this ocean; but latterly, that is, within the last twelve years, a great change has taken place, and a much superior class of vessels has been constructed. This is owing to the circumstance that whales have either become much more scarce, which some of the most experienced masters affirm, or they have become more knowing, more cautious and wilder, as others equally experienced assert. In all probability a combination of these causes would be nearer the truth. The sperm whale is endowed with an extraordinary acuteness of hearing, and the smallest splash of a paddle or an order given in too loud a tone will be the signal for instant disappearance; and as they are either taught by nature or experience that they can, and vessels can not, go "dead in the wind's eye," they dart off in that direction and are soon lost to sight. It has been found, therefore, that a fast sailing clipper, although she can not compete with the whale when thoroughly alarmed, yet, when he is seen from aloft, she can, by quick sailing and proper manœuvering, get more rapidly within lowering distance, and thereby have a great advantage over the old tubs that formerly went on sea. Many full, and numbers of half, clippers have been of late years added to the whaling fleet, and others are annually being built. As a matter of course, new, light, and commodious vessels render the labors of the seaman much less, and their comforts much greater.

There is no more of that everlasting pumping, patching and caulking; these have been, more or less, done away with. The men have dry bunks to sleep in; and when not cutting in whales or trying out oil, their work is comparatively light.

It was also found that the system of bad beef, bad pork, and worse biscuit turned out in the end an unprofitable economy; for good men, accustomed to wholesome food at home, and shipped at small lays or shares, would desert, with the hope of bettering themselves, and the master would consequently be compelled to take any class, whether good or bad, to make his complement, giving, at the same time, better lays and a large advance. I am satisfied that there are no vessels afloat, as a general rule, which have better provisions and in greater abundance than whalers.

Besides the salt, provisions and small stores, these vessels touch at some port at least every six months and lay in large supplies of fresh meat, vegetables, and fruits. On one occasion I knew a master to buy some sixty barrels of sweet potatoes, paying a high price for them, although told that they were too old to keep. His reply was that there were no others to be had—which was a fact—and if we took them on board, the men would be satisfied even if we had to throw them into the sea in two days.

It will be seen from the foregoing that there has been considerable improvement in the building of vessels and the care for the comfort of the men, and I wish sincerely my report could cease here. I should be only too glad if over the picture which I shall now be compelled to sketch, I could draw a curtain. I would be glad for the sake and name and reputation of our countrymen engaged in whaling, but having imposed upon myself this, which I conceive to be not a task but a sacred duty, I will not shrink from doing justice to the mariner, after having bestowed that praise which was due to the owner and master.

In order to make myself thoroughly understood, it will be necessary to explain that, generally speaking, when a vessel is being fitted out for a whaling voyage to the Pacific Ocean from the United States, a shipping master is applied to, who, if he has not on hand a sufficient number of men, immediately sends his *runner* through the interior of Massachusetts, New Hampshire, Vermont, New York, and even as far as Ohio, to pick up what are termed green hands. As these shipping masters make large profits upon each and every man whom they procure, they use every means in their power to excite the fancy and stimulate the ambition of those whom chance may throw in their way. They return to the port with ten or fifteen fine able-bodied young men, who are shipped by the proper authority, and are then told they can amuse themselves at their boarding house until the day of sailing; and that the shipping master has orders to supply them with clothing adapted to and necessary for the voyage they are about to undertake.

The time of sailing arrives. All hands are huddled on board. Their chests, into which they have had no chance of looking, are put into the fore-castle when the vessel is about getting under way. They have already signed a receipt for it. The order is given to make sail, and off they speed on a voyage of four years.

Each sailor is charged in the owner's books with an average outfit of seventy dollars. But this sum is not paid the shipping master until the vessel has been six months at sea. By many owners' interest is charged on this sum for outfit, from the day of sailing until the return of the vessel.

When at sea the sailor opens his chest for the first time, when it is discovered, alas too late, that he has received, including the value of the chest and all in it, property to the amount of from twenty to twenty-five dollars. The result is that, in the beginning of the voyage, the men are not only dissatisfied, but they are compelled, upon the first appearance of cold or rugged weather, to seek warm clothing from the slop-chest, which in many instances is placed on board by the owners as a profitable speculation, they paying the master a small commission for this trouble.

The lay or share of a green hand is from the one one hundred and eightieth to the one-two hundredth; that is, one barrel of oil for every hundred and eighty or two hundred that are taken. And I will now show what profit accrues to a green hand.

A sperm whale ship of 350 tons will take, on a voyage of four years, 1,200 barrels of sperm oil. This is a liberal average. The share or part which the sailor who has the 1 180 lay will have coming to him will be two hundred and ten gallons, or equal at the present home prices to two hundred and sixty-two dollars and twenty-five cents; but from this sum there are to be made sundry deductions. Ten per cent. discount on the amount of oil taken for leakage and shrinkage is always made, and very frequently three per cent. for insurance, although if the vessel is lost with five hundred barrels of oil on board and it is fully covered by insurance, the owners recover all and the men get nothing; because this charge is not made on the men until the vessel is safe home, and the policy of insurance is of course made out in the name of the owner.—Or, as an old sailor once expressed himself to me when a vessel was burnt in the bay, "It is no use, sir, to give me a certificate, the owners play an open and shut game. If the

vessel gets home I pay for insurance, but if she is lost they pay the insurance and pocket the proceeds." And it is so.

Then the accumulated interest (not always charged) on the original seventy dollars outfit and twelve per cent. per annum on any money given as liberty money during the voyage. Finally ten dollars is charged every man, whether discharged on the coast or at home, for "fitting, shipping and medicine chest," a phrase the meaning of which I have never been able to have satisfactorily explained to me.

The following is the result of the seaman's voyage of four years:

Sailors' share reduced to money.....	\$262 25
Less fitting, shipping and medicine chest..	\$10 00
Ten per cent. discount on \$253 25.....	26 22
Three per cent. insurance on \$262 25.....	7 86
Money originally advanced.....	70 00
Interest on same.....	16 80
Cash advanced during voyage.....	30 00
Interest on same, one per cent. per month.	7 20
Clothing which he was compelled to draw, owing to his bad outfit.....	40 00
	208 07

Amount to be received at the end of voyage..... \$54 16

But, allowing that every dollar of the \$262 25 should be handed to the seamen at the end of the voyage; that the seventy dollars first advanced should be admitted as a gratuity; that the outfit should have been properly and honestly put up; that even the money advanced and the clothes given on the voyage, and all the interest upon these various sums should be thrown in as a gift to encourage the young man to continue a profession for which he may by this time have conceived some liking, what would be his monthly wages?—A sum so preposterously small, that I feel almost ashamed to mention it. It seems incredible that an intelligent, active, young American, should pass through four years of labor, (not to mention dangers from both sea and monster,) separated from family and country, at the rate of five dollars and twenty-two cents per month; yet such is the case.

Table showing the Value of the Whaling Vessels, Interest on same, Annual Expenses, etc.

Estimated value of the 661 whale vessels sailing from the United States, including their outfits, provisions, and the advances made to seamen on the day of sailing, at the rate of \$25,000, each.....	\$16,525,000
Six per cent. per annum interest on same.....	981,500
Ten per cent. per annum allowed for wear and tear.....	1,600,000
Two and a half per cent. insurance.....	413,125
Fresh supplies purchased by the masters equal to about \$1,200 per annum each.....	793,000
Amount of money paid to masters, officers and crew, being their shares of the oil taken, equal to one-third of the gross value of the products.....	4,013,601
Total amount of money invested, including interest, etc.....	24,336,226
Value of the annual amount of oil taken, showing a clear yearly profit of forty-six per cent.....	12,040,805

Difference between the whole capital invested and the yearly profits..... 12,295,421

THE CORN TRADE OF ENGLAND—AMERICAN AGRICULTURE.

The popular belief, that the United States are the first grain growing country in the world; that they feed the whole world, and that but for this the world would starve, owes its origin, no doubt, to that most reliable source of information—stump oratory. It is a very flattering idea, too; but it is all moonshine, as we shall see directly.

England is the great grain market of the world, and the proportion in which the different nations contribute to her wants, will be admitted to be a pretty fair measure of their respective capacities for agriculture. Returns

just laid before Parliament, state that the quantity of grain, meal, and flour, imported into the United Kingdom, during the year 1848, amounted to no less than 11,296,705 quarters, valued at £20,000,000, or \$100,000,000. On examining the sources whence this enormous supply was derived, it appears that the Continents of Europe, Asia, Africa and America all contributed towards it, and that the United States, so far from being the first contributor, occupies the fourth or fifth position in the order of the competing countries, as the following table, in which the imports of flour are reduced to grain, will show:

	Quarters.	Quarters.
1. Russia.....	963,999	
Northern Provinces.....	1,318,402	2,282,401
2. Turkish Dominions.....		
European Turkey and Syria.....	463,388	
Wallachia and Moldavia.....	783,295	
Egypt.....	70,270	2,026,872
3. France.....		1,695,405
4. Germany.....		
Prussia.....	1,001,563	
Other parts of Germany.....	209,172	
Hanse towns.....	299,445	1,510,170
5. United States.....		1,500,481
6. Italian States.....		267,641
7. British North America.....		217,631
8. Holland.....		147,549
9. Spain.....		22,945
10. Imported from various other countries.....		250,424

Total imports of grain into Great Britain.. 11,296,705 qrs.

That France should supply the large quantity of 1,695,405 quarters may appear incredible, but it is satisfactorily explained. Wind and water power mills have not yet been supplanted in France by the superior, more economical steam-mills of England and the United States, and so France takes for her exports of grain an equivalent in flour from England, which fact suggests an increased direct importation of flour from the United States into France as a profitable business. The exports of Prussia, 1,001,562 quarters, which appear also large, include a certain quantity of Russian produce, which in transit goes from the Polish provinces to Prussian ports for shipment, but as the exports of Holland, 147,549 quarters—which comes from the Russian Rhenish provinces and Westphalia, Holland having no surplus—are not included in the above amount of 1,001,563, it may be admitted as pretty near correct. At all events the total exports of Germany, 1,510,170 quarters, is rather below the reality as it does not contain the considerable quantities exported by the way of the Danube, which figure under the exports of European Turkey. However this may be, it can not affect the assertion that the United States is not the first but only the fourth power in the principal grain market of the world. This is a highly important fact, worthy of earnest reflection. It suggests that the immense consequence usually attached to our foreign grain trade, as if the salvation of the country depended upon it, is an exaggeration; that the trade benefits the city of New York rather than the country at large, and that it is high time for the latter to cease relying too much upon this source of wealth, and to direct their attention and means, more than it has done hitherto, to the development of such industry as is less subject to competition than the grain trade, so that we may at last become able to produce our own supply of manufactures and thus become truly independent. It further suggests that our boasted system of expansion is not quite so favorable to agriculture as is generally supposed to be. Germany, though she has not the pretensions of being a chiefly agricultural country, but rather prides herself on being industrial, employing as she does 50 per cent. of her laboring forces in manufactures, while in

RAILROAD EARNINGS.

The following is a statement of the Earnings and Expenses of the Pittsburgh, Fort Wayne and Chicago Railroad in March, 1859:

EARNINGS.

From Freight.....	\$74,146 67
" Passengers.....	81,794 65
" Mails.....	7,823 00
" Rent of Road.....	5,500 00

Total.....	\$167,066 32
Earnings in same month last year.....	150,878 06

Increase, (10 7/8 per cent.).....	\$16,188 26
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EXPENSES.

Conducting Transportation.....	\$12,281 00
Motive Power.....	35,695 32
Maintenance of Way.....	11,495 88
Maintenance of Cars.....	11,010 69
General Expenses.....	5,610 99

Total.....	\$95,284 88
Expenses in same month last year.....	69,824 43

Increase.....	\$25,460 45
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Net Earnings in March, 1859.....	\$71,781 44
" " " " 1858.....	81,053 63

Decrease.....	\$9,272 19
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EARNINGS OF THE ILLINOIS CENTRAL FOR MARCH, 1859.—The report of the traffic department of the Illinois Central for March, is:

Receipts from Passengers.....	\$64,714 70
" " Freight.....	71,254 00
" " Mails.....	6,358 33
" " Rent of Road.....	5,133 00
" " Other sources.....	3,664 56

Total receipts in Month of March, 1859.....	\$151,124 59
" " " " 1858.....	163,647 71

Total receipts in Month of January, 1859.....	\$418,011 61
" " " " 1858.....	410,379 17

The receipts in the Land Department since the commencement of this month have been at the rate of \$2,000 per day, which will aggregate \$60,000 for the whole month, sufficient to extinguish \$45,000 of bonds.

TESTING THE STRENGTH OF IRON BEAMS.—On Monday, April 18, there were some experiments at Trenton, N. J., on the strength of iron beams made for the government, at the rolling mill of the Trenton Iron Company.

The beam is in the usual form, the stem six inches high, and a quarter of an inch in thickness and three inches wide, at the top and bottom. The beam was twelve feet in length between the bearings, and the pressure was applied in the center, by means of a powerful hydraulic press. Under a pressure of 6,500 pounds, there was a deflection of about half an inch, but on relieving it from pressure the bar sprung back to its original position. An addition of 500 pounds showed a slight set, which continued to increase until at 10,500 the set was two inches and a half, and an addition of 500 pounds warped and twisted the bar, showing that its ultimate strength was designated by 10,500 pounds. The beams are for the roof of the Custom House at New Orleans, and are being made under the direction of Maj. Anderson, U. S. A., who superintends the government work at this place. The beam tested yesterday is of a new pattern, weighing only thirty-nine pounds to the yard, but calculated to sustain great weight—gaining strength without increasing the weight inconveniently.—*Mining Register.*

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FIRST TRAIN, 6 A. M.—Chicago and Terre Haute Day Express—Through to Terre Haute, Lafayette, and Chicago, with but one change of cars.

SECOND TRAIN, 4:15 P. M.—Accommodation—The 4:15 P. M. train arrives in Indianapolis at 10:10 P. M.

THIRD TRAIN—Chicago and Terre Haute Night Express—8 P. M.—Arrives at Indianapolis at 1 A. M. This train runs through from Cincinnati to Chicago, with but one change of cars.

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Springfield,	Jacksonville,
Rock Island,	Danville,
Galesburg,	Burlington,
Kenosha,	Milwaukee,
Mattoon,	Pana,
Naples,	Peoria,
Galena,	Dunleith,
Quincy,	Racine,
Prairie du Chien,	Decatur,
Bloomington,	Joliet,
Lasalle,	St. Paul,

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No. 1 Burnet House, north-west corner Third and Vine Streets.

Also at the Walnut Street House.

J. S. SHACKELFORD, Ticket Agent.
And at the Depot, where all necessary information can be had.
H. C. LORD, President.
W. H. L. NOBLE, General Ticket Agent.

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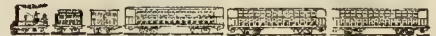
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New Time Table

OF THE

NEW YORK CENTRAL R. R.



Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp. 7:00 A. M.	7:00 P. M.	7:00 P. M.
Mail..... 9:00 A. M.	12:50 A. M.	
New York Exp. 11:15 A. M.	9:10 P. M.	9:00 P. M.
Night Exp. 5:00 P. M.	4:00 A. M.	4:00 A. M.
Utica Accom'n. 6:00 P. M.	Ar. U. 10:00 P. M.	
N. Y. Mail..... 11:15 P. M.	10:0 A. M.	10:00 A. M.
Leave Buffalo.	Leave Bridge.	Arr. Alb'y.
New York Exp. 5:15 A. M.	5:15 A. M.	3:30 P. M.
Steamboat Exp. 8:00 A. M.	8:00 A. M.	8:00 P. M.
Mail.....		2:30 P. M.
Cleveland Exp. 6:00 P. M.	6:00 P. M.	4:40 A. M.
Cincinnati Exp. 11:00 P. M.	11:00 P. M.	8:30 A. M.
Utica Accom'n.		10:00 A. M.

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MARSHALL, Harrison Co., Texas,
March 25, 1859.

To the Stockholders of the Company:

I receive, by every mail, a large number of letters, from stockholders residing in various sections of the Union, making particular inquiries as to the condition of things in Texas, and the progress of the contest now going on in vindication of our common rights. It is utterly impossible to answer these letters. I could not do it, if I were to do nothing else.

I have, therefore, to say to the Stockholders that, in order to obviate the necessity of writing to each individual, I have determined to publish from time to time, weekly, semi-monthly, or monthly, or oftener if occasion requires, a concise statement of the transactions in Texas; and the progress of the contest. These Reports will be published in the Texas Republican, Marshall, Texas, R. W. Loughery, Proprietor. The Texas Republican, throughout the existing controversy, has defended the interests of the Old Stockholders. Our Stockholders who may desire to see these Reports, or to get correct information from Texas, should at once subscribe for this paper. The subscription price is \$2 50, which the publisher authorizes me to say can be sent on, by mail, at his risk.

JEPHTHA FOWLKES,

President of the Southern Pacific R. R. Co.

G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

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The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater.
Its welding nearer perfect, and its durability superior.
Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

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No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by
VOSE, LIVINGSTON & CO.,
March 1858. 9 South William St., N. Y.
Feb. 25, tf.

1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th, Corby, Gossin & Co.'s make, for sale very low by
TRABER & AUBERY,
7 Public Landing

A Book for Every Business Man!

JUST PUBLISHED

THE POST-OFFICE GUIDE!

For Post-Masters and Business Men.

CONTAINING

A Complete List of Post-Offices in the United States and Territories, arranged by States and Counties; A Complete List of all Distributing Post-Offices; Rates of Foreign and Domestic Letter Postage; Rates of Printed Matter, Transient and Regular; Abstract of the Laws and Regulations of the Post-Office Department, &c., &c.

COMPILED BY E. PENROSE JONES,
Late Assistant Post-Master at Cincinnati.

Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.

U. S. BLANK AGENCY, CINCINNATI POST-OFFICE,
January, 1859.

This work has been carefully compiled and corrected by E. PENROSE JONES, Esq., late Assistant Post-Master of the Cincinnati P. O., from the Records in this Department, and other sources, and contains the most complete list of Post-Offices especially of the Western, North Western, and South-Western States, yet published.

MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

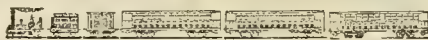
The book makes an actavo pamphlet of about 100 pages. The entire matter is kept standing in type, and as the compiler is promptly advised of all New Offices, Changes and Regulations of the Department, the information is corrected up to the last day of publication, an advantage possessed by no other work of the kind.

OBSERVE, That this list is arranged by States and Counties, making it especially valuable to business men. No similar arrangement has been published since 1855. There are 3000 more offices in this than in any book heretofore issued. The Price is one-half that of any work of the kind now published.

Single copies sent by mail (postage prepaid) to any address, upon receiving Twenty-five Cents in Silver or Postage Stamps. Five Copies sent for \$1.00, or Twelve Copies for \$2.00.

Address,
C. S. WILLIAMS,
194 Walnut Street,
Cincinnati, Ohio.
Mar 10. tf.

Commencing April 11, 1859.

LITTLE MIAMI
—AND—
COLUMBUS AND XENIA

RAILROAD.

FOUR TRAINS DAILY.

Three Through Express Trains.

FIRST TRAIN—No. 1 Express, at 6 A. M., connects via Columbus and Cleveland; via Columbus, Crestline, and Pittsburg; Detroit via Cleveland and Steamers. This train stops between Cincinnati and Columbus, at Loveland, Deerfield, Morrow, Xenia, Cedarville, South Charleston, London, and West Jefferson.

SECOND TRAIN—No. 2 Express, at 8 A. M., connects via Columbus, Bellair, and Benwood; Wheeling, via Columbus, Steubenville, and Pittsburg; via Columbus, Crestline, and Pittsburg; via Columbus and Cleveland; Detroit, via Cleveland and Steamer; Springfield. This train stops between Cincinnati and Columbus at Plainville, Milford, Loveland, Morrow, Spring Valley, Xenia and London.

THIRD TRAIN—Accommodation, at 4:40 P. M., for Columbus and Springfield.

FOURTH TRAIN—Night Express, at 11:30 P. M.; connects via Columbus, Bellair, and Benwood; Wheeling, via Columbus, Steubenville and Pittsburg; via Columbus, Crestline and Pittsburg; via Columbus and Cleveland. This train stops at Loveland, Morrow, Corwin, Xenia and London. Sleeping Cars on this Train.

IF No. 1 Express through to Cleveland without change.

The Night Express Train, leaving Cincinnati at 11:30 P. M., runs daily, except Saturdays. The other trains run daily, except Sundays.

For all information and Through Tickets to Boston, New York, Philadelphia, Baltimore, Washington, Buffalo, Niagara Falls, Dunkirk, Cleveland, Pittsburg, Wheeling, and all Eastern places, please apply at the offices, Walnut Street House, No. 1 Burnet House, south-east corner of Broadway and Front Streets, and at the Eastern Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Superintendent.
Omnibuses call for passengers by leaving directions at the Ticket Office.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE.

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the

West, South-West and North-West.

Fare to New York and Boston ONE DOLLAR less than via any other route.

TWO TRAINS

Leave Wheeling daily at 8:05 P. M., and 11:30 A. M. Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City. Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2. Quick time and sure connections.

Inquire for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

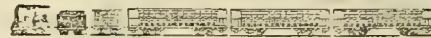
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MIDDLETON, STROBRIDGE & CO.,
Jan 8 ly 119 Walnut st., Odd Fellows' Building

April 11, 1859.

Cincinnati, Hamilton and Dayton,



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FOUR TRAINS

LEAVE THE SIXTH STREET DEPOT DAILY.

TRAINS RUN THROUGH TO RICHMOND, LIMA, SANDUSKY, AND DELAWARE WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND NORTH-WESTERN CITIES.

G. A. M. EXPRESS TRAIN—For Cleveland and Pittsburg, via Delaware, makes close connection at Crestline for Pittsburg, Baltimore, Philadelphia, and New York; and at Cleveland for Dunkirk, Buffalo, Boston and New York. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Munice. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

S. A. M. MAIL TRAIN—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STEAMER FOR DETROIT; at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo; Toledo, Detroit and Chicago. This train also connects at DELAWARE with the C., C. and C. Road, for Cleveland and points East.

4:30 P. M. TRAIN—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Connects, also, at Dayton for Troy, Piqua, Sidney, Lima and Chicago. Also connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago.

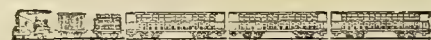
6 P. M. TRAIN—For Dayton and all way stations.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; No. 3 Burnet House; or at the Sixth Street Depot.

D. McLAREN, Superintendent.

Commencing April 10, 1859.

OHIO & MISSISSIPPI



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Through without Change of Cars.

TWO DAILY TRAINS FOR VINCENNES, Cairo, and St. Louis, at 8:30 A. M., and 8:30 P. M.

Accommodation train at 5 P. M.; for Evansville at 8:30 P. M.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natches and New Orleans.

One Through Train on Sunday, at 8:30 P. M. RETURNING.—FAST LINE—Leaves East St. Louis, (Sunday excepted) at 7 A. M., arriving at Cincinnati at 10:10 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 2:40 P. M., arriving at Cincinnati at 7 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the offices: Walnut Street House, bet. Sixth and Seventh Streets, No. 1 Burnet House, corner office; north-west corner of Front and Broadway; Spencer House Office; and at the Depot, corner of Front and Mill Streets.

P. W. STRADER, General Ticket Agent.

Omibuses call for Passengers.

Union Works, Baltimore.

POOLE & HUNT, Iron Founders & General Machinists.

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.
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SHAFTING, PULLIES and HANGERS.
WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap2

ANDERSON, GATES & WRIGHT, STATIONERS, BOOKSELLERS, —AND—

Blank Book Manufacturers,
No. 112 MAIN STREET,

East Side, between Third and Fourth Streets,
KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,
Printed to order in the best manner.

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Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,
(SUCCESSORS TO JACOB ERNST.)
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SCHENECTADY Locomotive Works, SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,

AND TENDERS, AND
RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding the work to any part of the country, without delay.

JOHN ELLIS, Agent.
WALTER McQUEEN Supt. Auld. 1y

N. B.—We have two Freight Engines on hand suitable for the 4 feet 10 in. gauge. Cylinders 16 inches diameter, 22 inches stroke. Driving wheels 44 feet diam. December 18th, 1858.

D. M. CARHART, TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builders.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address,
Respectfully Yours,

D. M. CARHART,
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Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, Envelope, Manila paper; Bonnet boards, Envelopes, Gold & steel Pens, Penholders, Pencils, Pen-racks, Copying Books, Ink and surs, Sealing Slates, Mucilage, Book rests, Bill Envelope and Card cases, Cash and Post Office boxes, Rulers, Letter cases, Clips, Weights, and Files; Date Calendars, together with all other articles used in the counting-house.

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To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly paged, including all sizes, from the small memorandum book to the large Royal and Imperial Ledger, and a variety of styles of workmanship. order of any description, with or without printed headings, and warranted in quality of ruling and durability of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

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We are prepared to Print and Bind books of any style and in any quantity, at rates as low as the quality of work warranted in this where. Our executing these the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and Bill of Lading, Railroad and Cards, Circulars, or any other description of printing, will that we do such jobs despatch. Orders re-

Stereotype, of any description that may be desired, as the same can be executed by our facilities for branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and Bill of Lading, Railroad and Cards, Circulars, or any other description of printing, will that we do such jobs despatch. Orders re-

Publishers,

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, Clarke's Compendium, Mental Arithmetic, Plutarch's Lives, Josephus, Spectator, Chain of Sacred Wonders, Familiar Science, Webb's Monitor, Soden's German, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, of narrative and Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

43 MAIN STREET CIN.

HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high-pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,
No. 66 Broadway, N. Y.

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action SUCTION & FORCE PUMP

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps, as the best Pump now in use, and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings, Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions. Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair, Ohio Mechanics' Institute. June 18, 1855—15

ENGINEERING!!

The undersigned is prepared to furnish

SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of Steam Vessels, Engines, Boilers, Mill Work, &c. Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS, And Railway Machinery of every Description, While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for ASHCROFT'S STEAM GAUGE, ALLEN AND NOYE'S METALLIC SELF ADJUSTING CONICAL PUMP, ING, DUDGEON'S HYDRAULIC JACK, S. Also, for Water Gauges, Indicators, Steam Whistles.

CHAS. W. COPELAND,
Consulting Engineer,
64 Broadway, N. Y.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned THEODORE DEHON,
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ar Broadway, New York

The Great Arnold Secret Discovered at Last.

BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.

MANUFACTORY NO. 39 VINE ST.,
CINCINNATI, OHIO.

READ THIS!

I have, at the request of Messrs. Cook, Merritt & Brown, Wholesale Stationers, 18 Beekman Street, New York, analysed two samples of FLUID INK, one marked *Arnold's Chemical Writing Fluid, P. & J. Arnold, London.* The other—BUTLER'S MERCANTILE RECORD FLUID, CINCINNATI.

I find both of these INKS to contain the same ingredients, and in the same state of combination. From the result of the various tests to which I have subjected them, I find that they are equal in *quality as well as durability.*

JAMES R. CHILTON, M. D., *Chemist.*

New York, November 9, 1859.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. RECORD.—For Ledgers and Records Only. MERCANTILE.—For Books, Letters, and General Purposes. COPYING.—For Letter Press only. Have had awarded them Fourteen Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

Transportation Office, Cincinnati, Hamilton and Dayton Railroad.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to *excel* any thing of the kind we have *ever* used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial.

Yours, truly,

J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio & Mississippi; Central Ohio; Baltimore & Ohio; Jackson and Vicksburg; Bellefontaine and Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena and Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B.—Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of weight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

GENERAL

RAILWAY SUPPLY AGENCY.

SNOOK & HILL'S PATENT

LOCOMOTIVE LAMPS.

83 Liberty Street, Cor. of Broadway,
NEW YORK.

JOHN W. KELLY
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

RAILROAD ENGINES & CARS,

ALSO AGENT FOR THE SALE OF

HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,

JUDSON'S GOVERNOR VALVE.

Orders solicited and promptly filled.

MOSELEY'S TUBULAR WROUGHT IRON



ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs, are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeted always Iron.

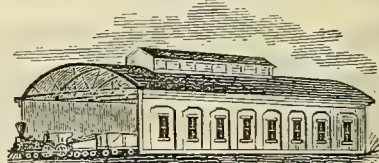
The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges. We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

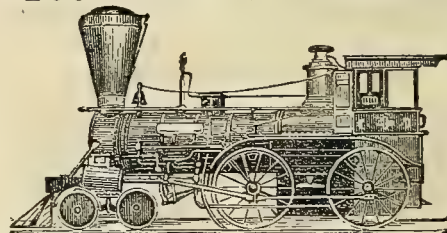
Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O.
may 13. MOSELEY & CO.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20 MOORE & RICHARDSON.

THE KENTUCKY MILITARY INSTITUTE,

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of **Col. E. W. MORGAN**, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, but more extended in Mathematics, Mechanics, Machines, Construction, Agricultural Chemistry and Mining Geology; also in English Literature, Historical Readings, and Modern Languages, accompanied by daily and regulated exercise.

Schools of Architecture, Engineering, Commerce, Medicine, and Law, admit of selecting studies to suit time means, and object of Professional preparation, both before and after graduating.

The twelfth annual term is now open. Charges, \$102 per half-yearly session, payable in advance.

Address the Superintendent, at "Military Institute, Franklin Springs, Ky.," or the undersigned.

P. DUDLEY.
President of the Board

Jan. 5 tf.

The Railroad Record.

E. D. MANSFIELD, - - - - } Editors.
T. WRIGHTSON, - - - - }

CINCINNATI:

Thursday Morning, May 5, 1859.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.

One square, single insertion.....	\$1 00
“ “ per month.....	3 00
“ “ six months.....	12 00
“ “ per annum.....	20 00
“ column, single insertion.....	5 00
“ “ per month.....	10 00
“ “ six months.....	40 00
“ “ per annum.....	80 00
“ page, single insertion.....	15 00
“ “ per month.....	25 00
“ “ six months.....	110 00
“ “ per annum.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

IF The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

On the 1st of February, Wisconsin had 92 Banks doing business, and 12 winding up. The 92 doing business have:

Capital.....	\$7,995,000 00
Circulation.....	4,695,170 00
Deposits.....	3,022,284 25
Specie.....	706,009 22
Cash Items.....	83,893 51
Public Securities.....	5,032,445 00
Private Securities.....	9,262,457 25

The 12 that are winding up have a dollar in gold in the Bank Comptroller's hands to every dollar of outstanding circulation, so that every broken Wisconsin Bank note is redeemed at par, whenever presented at the Bank Department.

Illinois is equally fortunate in the working of her Free Banking Law. Still there is a danger that the currency of both these States will fall into discredit. In Illinois some \$70,000 are lying under protest—protested because the banks would redeem in nothing but small silver, and this they were foolish enough to pay out in a dilatory manner. The consequence of this state of things is to put exchange so high, when bought with currency, that every solid business man becomes dissatisfied.

SOCIAL STATISTICS.

IMMIGRATION AND ITS EFFECTS ON POPULATION.

The effects of immigration on the population and character of the United States, has been much discussed by the Statisticians of Europe, as well as the politicians of this country. At this time, the subject is in no doubt; for, we have the precise number of immigrants, and the price population, at decennial periods. In general, the effects of immigration from Europe have been much overrated. We speak of the last half century, of course, and not of the Colonial period. In the half century from 1750 to 1800, immigration and its effects produced great results—much greater than they have since.

Pennsylvania, now deemed (out of Philadelphia,) almost altogether a homogenous State of native population, was at one time represented in the Legislature by a majority of Germans and Scotch Irish. Both proved a good population. The former filled up the Eastern part of the State, and the latter the Western. The character of the Irish immigration has, however, materially changed. From 1790 to 1800, numerous ship loads of Irish Protestants came from Londonderry and Belfast. Latterly, the immigration has been chiefly from the South of Ireland, and Catholic. In future, probably, the immigration from that country will be much less; while that from the Continent of Europe will only increase under the influence of war and turmoil.

The proportion of foreign population at this, or at any other period, is easily ascertained. The official returns of the State Department give all the facts necessary to ascertain it. Take the following statement:

From 1790 to 1843.....	1,209,126
“ 1843 to 1850, inclusive.....	1,447,191
Total to 1850.....	2,656,317
Alive in 1850 by the Census returns.....	2,210,839

The latter number, however, included the inhabitants of New Mexico, etc. Of the whole number of immigrants up to 1850, over 1,700,000 had come in since 1840, so that of the number alive in 1850, the greater part had come in within ten years.

The total number of immigrants since 1850, were as follows:

In 1851.....	408,828
In 1852.....	397,343
In 1853.....	460,982
In 1854.....	430,474
In 1855.....	230,476
In 1856.....	224,496
In 1857.....	271,558
In 1858.....	144,652
Aggregate.....	2,568,809
Previously.....	2,656,317
Grand total.....	5,215,126

We believe the government aggregate is slightly greater, perhaps, embracing a portion of a year. Taking in 1859, the aggregate is very nearly 5,400,000. Taking periods of three years, the last three years have given less immigration than any in fifteen years.

It will be entirely safe to say, that no immigration will ever again take place bearing the same proportion to the population of the United States. For this there are two sufficient reasons:

1st. That the population of this country has increased so much, that it would require a very much larger number to make the same proportion.

2d. That the surplus population of Ireland and Germany has been much thinned off. The famine and emigration reduced the population of Ireland two millions; and the emigration from the country will never be what it has been.

One of the most interesting aspects of this question is to determine, in what proportion, the foreign population exists to the native. The number of foreign born in the country in 1850, is known. Those who have come in since are diminished by the proportion of deaths. This proportion in the United States is 1 in 40 per annum; or 2½ per cent. Knowing the number of each year's immigration, we may determine the number who have died, with some exactness, as well of those since, as before 1850. The proportions will be as follows, viz:

	Immigrants.	Dead.	Remaining.
In 1850.....	2,210,839	486,000	1,724,939
In 1851.....	408,828	80,800	328,028
In 1852.....	397,343	68,000	329,343
In 1853.....	460,982	69,000	391,982
In 1854.....	430,474	56,000	374,474
In 1855.....	230,476	23,000	207,476
In 1856.....	224,496	18,000	206,496
In 1857.....	271,558	14,000	257,558
In 1858.....	144,652	4,000	140,652
Aggregates.....	4,779,648	818,800	3,960,848

There are, therefore, in the United States, at this time (1859) 3,960,848 foreign born persons. Of this number, more than half immigrated since 1850. Of the number now alive, about 100,000 die annually. If the annual immigration, therefore, be not more than 200,000 per annum, (and it is not likely to be,) the annual increase would be at the rate of only 200,000 per annum; or 1,000,000 in ten years. The whole increase of population now in the Union, is (in the average) 33 per cent. decennially.

In ten years, therefore, the increase of foreign born population would be 1,000,000 and the increase of native people about 9,000,000; for the present population is near 30,000,000. Thus, we see, that the native population will increase ninefold faster than the foreign, at the rate of immigration, we assumed 200,000 per annum. The future, as to the influence of foreign immigration, is plain. It never can be as great proportionably, as it has been; nor, can it ever again perform so important a part in either the labor, or opinions of the country.

Another important point is to ascertain the proportion which the sexes, the children, and the adults bear to the whole. The government returns since 1844, show the following results, viz:

Males..... 2,430,000
Females..... 1,610,000

This gives 24 to 16, or Males 60 per cent.;
Females 40 per cent.

This shows that a large number of those who come to this country are men without families, who come, in the language of California, to "prospect," and adventure in new enterprises.

In fact, nearly one half of all the emigrants from Europe, are males between 15 and 40. The proportion may be seen as follows, for 1858:

Males between 15 and 20.....	19,296
" " 20 and 25.....	18,273
" " 25 and 30.....	17,801
" " 30 and 35.....	9,952
" " 35 and 40.....	7,652
Able bodied men.....	75,974
Whole emigration.....	144,906
Proportion of able-bodied men.....	46 per cent.

The number of children under the age of fifteen was 26,000, or about eighteen per cent.

Another interesting point is to know how many of the foreign born have become voters, and are now voters in this country. Here we must observe that, as five years are required for *naturalization*, only those who came before 1854, can now be voters. Hence, we must subtract, the number *alive* for the last four years. This number is 816,182, which, taken from the whole number alive, leaves 3,144,666. Supposing that *all* the men over twenty-one years in this number were *naturalized*, and the total is nearly forty per cent., viz., 1,200,000. There are now, in the United States, 4,200,000 voters; so that the *foreign born* votes would, on this statement, be thirty per cent. It would not be half that, but for the great proportion of young men among the emigrants. We think, however, that there are many *not* naturalized among them, so that the real proportion of foreign born voters is not over one-fourth. This proportion will, however, after the year 1860, (five years from 1855, when the immigration fell off,) be greatly diminished.

The proportion of *foreign born* population to native in 1850, (the whole population being 23,000,000) was 1 to 10. In 1860, (the population being then 31,000,000,) the proportion will be 1 to 9—the greatest which it can possibly reach. In 1870, it will probably be much less.

Assuming an average of ten per cent. for the foreign born population, it is obvious the influence either moral or physical of this body, on the character, progress, or government of this country are by no means so great as many have apprehended. Especially is this evident when we consider, that the degree of mind and education of the immigrant is by no means equal to the average, in our own country. Whatever the influence of this element may be, however, it is declining, and must henceforth decline in both amount and importance.

THE CAUSE OF THE INDIAN.

The object of this association is to co-operate with societies of a similar character in other parts of the Union, and, if possible, to induce the Government of the United States to effect a peaceful settlement of the difficulties which now exist between it and the various tribes of Indians that exist on our frontiers. This is a truly noble enterprise, and we beseech for it the sympathy and co-operation of all who have the sense of justice and humanity, and can appreciate the condition and sufferings of the red man. The movement is to be entirely free from secular or political speculation, or sectarian bias, and instead of sending a teacher to this point or that, it proposes to organize entire colonies of well ordered families, consisting of farmers, gardeners, mechanics, artists, and, in short, all persons capable of discharging the duties of true civilization, and by inter-associating with the Indians, to enable the latter to become self-sustaining. To accomplish this the society proposes not merely to call upon government for adequate laws, but to rouse public attention to the necessity of enforcing them. It proposes further, to select and recommend for the Indian Department, such only as are able and honest, and are willing to devote themselves in a disinterested spirit to the advancement of the cause. Of course this scheme utterly ignores the idea which seems to prevail on the frontiers, that in order to secure self-protection we must either feed or kill the Indians. It is believed that these untutored sons of the forest can, by enlightened and liberal assistance, readily feed and clothe themselves, and that, therefore, the fell work of rapine and slaughter is wholly unnecessary. We have long been impressed with the belief that a false and a cruel policy has been pursued towards the red man. He has been robbed, plundered, and hunted like a wild beast, and when, under the instinct of self preservation, he has ventured to strike back, his conduct has been magnified, and his offence been aggravated in language so exciting and glowing, that whole towns have rushed out in pursuit and in vengeance. Nay, in some sections of the Far West, Indian hunts are regarded as a sort of pastime, and the work of desolation and death has been carried on in a spirit at once exultant and jubilant—*Philadelphia Inquirer*.

Benevolence is a very good thing when properly exercised, (and there are abundant opportunities of doing so at home,) but we think that our Government already wastes too much of that article on some of the well trained bands of professional robbers that infest our western borders. The policy of the Government making treaties and giving presents to organized bands of cut-throats and desperadoes, has had the effect to encourage them in their vices, and entail an amount of suffering and hardship on the hardy pioneers that have carried civilization and the arts over the continent, that we, here in our peaceful homes can not appreciate. There are, undoubtedly, some few tribes that might be benefited by attempts to civilize them, but we really would like to see the good hearted, benevolent people of Philadelphia try their hands on the Apaches or Comanches. The truth is, those tribes (and there are a few more

left of the same sort,) possess no instincts or other qualities that are not held in common with the wolf, and the sooner our government treats them in the same manner as they do that worthless and rapacious animal, the better it will be for all concerned. As a sample of the style in which those red-skinned gentlemen "do business," we quote the following from the *Arizonian*, a paper printed right on the war-path of these hell-hounds:

APACHE EXPEDITION TO SONORA.—From passengers on a late Overland Mail, we learn that a band of nearly three hundred Apache warriors, was about starting from the vicinity of Apache Pass, on a stealing foray into Sonora. Americans traveling in Sonora should be extremely cautious, as Apache treaties with Americans do not hold good across the line, and the Indians seize every opportunity to rob and murder Americans when ever they find them in Sonora. Several cases of the kind have lately occurred on the road to Hermosillo.

IRON MANUFACTURES.

The important interest engaged in Iron Manufactures in this country and their present depressed condition, have called for extended research into the statistics of the subject. It was not expected that our government should exert itself in any thing of so slight importance to party as domestic industry, the duty, therefore, of collecting the statistics devolved upon private enterprise. The task was undertaken by the American Iron Association of Philadelphia, which is just publishing the results of their labor in book form. The following extracts will give a clearer idea of the condition of the iron interest than can be formed from any statistics before made public.

The practical working of this Association may be understood, by the following statement from the Secretary's Report:

Our correspondence has already reached every important iron region in the United States. And it will be organized and established soon, by extensive tours, upon a permanent basis. It now remains to visit in person the works not heard from to make the iron statistics of the whole country as reliable and as valuable a part of the material science of the day as any other. At the present moment there stand on file reports from all the anthracite furnaces in the United States except three—reports from one hundred out of one hundred and seventy charcoal and coke furnaces in Pennsylvania, and from ninety out of about two hundred known to exist in other States. We have also reports from forty-four out of one hundred and fifty—the whole number of rolling mills in the United States.

When the statistics of our own country have been obtained and published in a complete national form, then governmental and scientific reports of foreign countries will be added for comparison.

This was in 1851, and the Association has gone on with their work until, at this time, they have spent some six or eight thousand dollars in obtaining information from the various establishments throughout the country. The Report states:

The American Iron Association has exerted itself to effect an extensive survey and analysis of the iron productions of the United States. It has obtained authentic statistics of the manufacture of iron in the United States and Canada of 832 blast furnaces, 488 forges, and 225 rolling mills. There are three principal departments of iron manufacture: the first is represented by the blast furnace and blooming forges, producing crude iron from the ore; the second, represented by forges, properly so-called, turning cast iron into malleable blooms and slabs; and the third, represented by the rolling-mills, converting pig and malleable iron into manufactured shapes, ready for the mechanic and the civil engineer.

The following table will show the present extent and distributions of the works in these departments and in the different States of the Union:

STATES.	Anthracite furnaces...	Charcoal and Coke...	Abandoned furnaces...	Blooming forges...	Abandoned bloomaries...	Refinery forges...	Abandoned refineries...	Rolling Mills...	Abandoned...
Maine.....	1					1		1	
New Hampshire.....	1								
Vermont.....	5							5	
Massachusetts.....	3					5		1	19
Rhode Island.....								2	
Connecticut.....	1	14				6		5	
New York.....	14	99	6	42	1	3		2	11
New Jersey.....	4	5	12	48	99	2		10	1
Pennsylvania.....	93	150	102	1	3	110	44	91	5
Delaware.....								4	
Maryland.....	6	24	7					13	
Virginia.....		99	56			43		12	
North Carolina.....		3	3	36				1	
South Carolina.....		4	4	2				3	
Georgia.....		7	1	4				2	
Alabama.....		3	1	14				3	
Tennessee.....		41	33	50	2	9	3	3	2
Kentucky.....		30	17			4	9	8	
Arkansas.....				1					
Missouri.....		7				3		5	1
Illinois.....		2						1	
Indiana.....		2	3					1	
Ohio.....		54	26					5	15
Michigan.....		7		3				2	
Wisconsin.....		3							
Total.....	121	439	272	203	35	186	64	210	15
Working.....	1,159	Furnaces. 560			Forges. 389			R. M. 210	
Abandoned.....	386	Furnaces. 272			Forges. 99			R. M. 15	
In all.....	1,545	Furnaces. 832			Forges. 488			R. M. 225	

The prostration of the iron business is shown by the great number of abandoned iron works that were once in full operation. The various iron regions are set forth in the following summary:

There are certain geographical iron centers which are wholly irrespective of international boundary lines.

1. There is the iron region of Northern New York, which formerly included Vermont and makes its iron from primitive ores by means of 40 bloomaries and a few blast furnaces, three of which are now anthracite.

2. There is the hematite and primary ore belt of the Highlands, beginning in Western Massachusetts and running through Northern New Jersey into Pennsylvania, containing 44 charcoal and 22 anthracite furnaces and 60 forges, most of them making iron from the ore. Some of these works are of the oldest in the United States, and of Revolutionary celebrity. Yet the region itself hardly holds its own, in spite of its admirable location, in the present condition of the manufacture, owing to its ruinous proximity to the seaboard ports, glutted as they are with foreign iron.

3. Eastern Pennsylvania and North-Eastern Maryland is the greatest iron region in the

Union, containing as it does 98 anthracite and 103 charcoal furnaces, and 117 forges, none of which last produce iron from the ore. It is itself divisible into small areas, with distinct geographical and geological limits, affording primitive and brown hematite ores, and in the center lies its anthracite region of principal productiveness.

4. North-Western Virginia and South-Western Pennsylvania constitute together a fourth much smaller iron region, with its coal measure carbonate ores, and its 42 furnaces, and two or three forges. Its production in the table is accidentally increased by the circumstance that the great Cambria Works of Johnstown have been built within its northern limits.

5. Pennsylvania has still another and more important iron region in the north-west, including the north-eastern corner of Ohio. There 66 furnaces have been in blast, manufacturing iron from the buhrstone and other carbonaceous ores at the northern out-crop of the great bituminous coal region. All the forging of this region is done in the rolling mills and workshops of Pittsburgh and other centers of trade upon the Ohio waters.

6. The Iron-ton region through which the Ohio River breaks above Portsmouth contains 45 furnaces on the Ohio and 17 on the Kentucky side, some of which use the coal of the mine for fuel, and all of them the ores of the coal measures for stock.

7. The old iron making region of Middle and Eastern Virginia, a prolongation of the Pennsylvania region across the Potomac, supplied with the same brown hematite and magnetic ores, contains 16 furnaces in its division east of the Blue Ridge, only one of which is in blast, and 30 west of the Blue Ridge. It has also 35 forges.

8. In the northern part of East Tennessee, and north-west corner of North Carolina, is seen a knot of 41 bloomary forges and 9 furnaces using the hematite and magnetic ores of the highland range; while to the west of them, at the base of the Cumberland Mountain, and on the outcrop of the fossiliferous "dystone" ore of the upper silurian rocks, are 14 forges and five furnaces. In the south-western corner of North Carolina are five forges of the same kind, and further to the east is a belt through the center of North Carolina passing over the line of a few miles into South Carolina, consisting of 27 forges and 5 furnaces. There is also a small iron region in Northern Georgia along the line of the Chattahoochee, which passes over into Alabama. This whole country possesses an incalculable, inexhaustible abundance of the richest ores, while its production of iron still remains at a minimum.

9. There is as yet but one principal iron region in the far West, that of Western Tennessee and Western Kentucky, with its peculiar ores, and forty-five furnaces, and six or eight forges; but

10. In Missouri a beginning has been made with the Iron Mountain as a center, and there already exist 7 furnaces, in blast upon brown hematite and primitive ores.

DISTRICT OF COLUMBIA.—The value of property in the District of Columbia in 1858 was \$62,852,055, viz: individual property, personal and real, \$34,720,424; government reservations \$13,412,293, and cost of public buildings, furniture, statuary, paintings, etc., \$14,709,338.

[From the Harrison (Texas) Flag.]

SOUTHERN PACIFIC RAILROAD.

JUDGE FRAZER'S OPINION.

MARSHALL, Texas, April 14th, 1859

HON. C. A. FRAZER,

Dear Sir:—On account of the general interest felt, not only in Texas, but throughout the legal and financial circles of the United States, in the case of the State of Texas vs. the Southern Pacific R. R. Co., we have thought it best to report the case for publication, and have attempted to give a substantial report of your opinion delivered in the case. Will you be so kind as to examine the manuscript of the same herewith accompanying, and correct, if erroneous, and give the same the sanction of your written approval, and oblige

Yours, respectfully,

W. P. HILL,
R. V. RICHARDSON,
G. McKAY.

MARSHALL, Texas, April 14th, 1859.

Gentlemen—Your note of this date is before me, together with the accompanying report made by you of my decision in the case of the State of Texas vs. the Southern Pacific R. R. Co., and in answer I have to say, that your report is in substance and effect a correct report of my decision in that case.

Very respectfully,

C. A. FRAZER

To Messrs. W. P. Hill, R. V. Richardson, and G. McKay.

DISTRICT COURT, HARRISON COUNTY, }
Spring Term, A. D. 1859. }

The State of Texas vs. the Southern Pacific R. R. Co.

This is an information in the nature of a writ of *quo warranto*, instituted by the Attorney-General of the State under the direction of the Governor, alleging the following causes of forfeiture of character against this Company:

1st. A failure to make a report to the Comptroller of the State, showing the capital stock and the operations of the Company for the years 1855 and 1856.

2d. Holding meetings of the stockholders and Directors out of the State of Texas.

3d. Insolvency of the company.

4th. For suspending the construction of the work.

5th. Permitting a sale under a Deed of Trust.

6th. For not having a majority of the Directors and the President or Vice President to reside in the State of Texas on and since the 19th day of June, 1858.

A general demurrer with special exceptions was filed to the petition. The case was argued on behalf of the Defendant by Judge D. S. Jennings, J. Marshall, and W. H. Bristow, of Harrison county, Texas, and R. V. Richardson, of Memphis, Tennessee. On behalf of the State by J. M. Clough, District Attorney, A. Pope, and A. H. Willie, of Harrison county, Texas. After an able and elaborate discussion the Court delivered the following opinion: the Hon. Charles A. Frazer, presiding:

In deciding the questions argued and submitted upon this demurrer, I may say, that their novelty and difficulty might excuse different minds for coming to adverse conclusions from the same premises, or for making different premises, and, of course, arriving at opposite results.

The first point on the demurrer is, that the Legislature not having authorized this suit to be instituted, it ought to be dismissed for want of authority in the Attorney General to institute and prosecute it.

The right of the State of Texas to come into her own courts and seek the redress of her grievances is not questioned. The remedy and the form adopted for prosecuting it are also unexceptionable. But the question here does not go either to the right or to the remedy. The true inquiry is, has the State in this instance exercised this right, and claimed the use of this remedy? Has the State manifested its will that this suit should be brought?

This inquiry must be answered by deductions drawn from the nature and form of our Government, and the distribution of its powers. All powers not conceded by the constitution are reserved to the people. It is conceded by the counsel for the State that the Governor or Attorney General alone has the power to direct the institution of this suit—that no act of the Legislature had authorized it. Has the Governor such power by the Constitution? Sec. 10 of Art. 5, is relied upon as conferring this power. "He (the Governor,) shall take care that the laws be faithfully executed." But this power is simply and purely executive, as distinguished from *Legislative* and *Judicial* powers. In exercising it, he acts without the aid or co-operation of either of the co-ordinate Departments of the Government. If a mob should surround the court, determined to arrest by force of arms its proceedings, and the Sheriff could not otherwise disperse it, it would be the duty of the Governor, upon requisition properly made upon him, to call out the militia in numbers and strength sufficient to protect the court. In doing this, he would only execute the will of the people declared in the Constitution, and would execute it by the use of the means placed at his command for that purpose. Through the instruments of his power he acts directly upon the subjects of his jurisdiction, and not through a co-ordinate branch of the Government. Whenever in the pursuit of an object, he is led to the confines of another jurisdiction, he must not cross the line and invade it. If he can execute the law by the use of the means and instruments placed at his command by the constitution and laws, he ought to do so. But when their execution can only take place through another department of the Government he is a stranger to the proceeding. He can not call upon the judiciary to act upon any matter pertaining to the exercise of its jurisdiction. The case at bar pertains alone to judicial and not to executive powers. If the S. P. R. R. Company has violated its charter and subjected itself to the judgment of forfeiture, it is competent for the Governor to communicate this fact to the Legislature, and the Legislature being thus informed, may declare the will of the people, either by waiving the forfeiture, or by directing the Attorney General, the law officer of the people, to prosecute a suit in the judicial Department, to find the facts and to cause the law to be declared upon the same. And here begins the power and duty of the Attorney General in this matter. As the Governor is the constitutional officer and agent of the people to execute the laws, so the Attorney General is the constitutional officer and agent of the people, to represent their rights and interests whenever they direct the same to be investigated and adjudicated by the courts. Until so directed he can not act. He may advise the Governor that upon certain facts submitted to him, for his opinion, the right of the State to claim the forfeiture

has accrued, and upon this advice the Governor may recommend the Legislature to initiate the proper proceedings to have the forfeiture declared; but such advice and recommendation being given, their power is at an end, until the Legislature considers of the matter so advised and recommended, and determines for itself what course to pursue. It may adopt views and conclusions different from those advised and recommended by the Governor and Attorney General, and decide not to claim the forfeiture; or, it may adopt their suggestions and direct proceedings to recall the franchise.

These opinions are entertained and expressed without intending the slightest reflection upon the motives or the intelligence of the Governor by whose direction, it is admitted, this suit has been brought, or upon the Attorney General, who has brought it. No one knows better than I do, their purity of purpose, and their accurate and commanding intelligence. I know that they would not attempt the exercise of any powers, which they do not believe to be clearly delegated to them, and, as before remarked, the most honest minds may well differ upon this question. To my mind nothing is clearer than that the Governor, the Legislature, or the judiciary can only exercise powers expressly delegated. They can not claim power by intendment or construction. I abhor judicial Legislation; and if I believed that I could, in my discretion, assume jurisdiction over matters not expressly confided to me, as a judge, by the constitution and laws, I would resign my office, before signing this judgment.

The next point on the demurrer is, that the State has waived its right to claim this alleged forfeiture, and that this is shown by the acts of the Legislature, in reference to this Company, made a part of the petition in this case.

The right of the State to make this waiver is conceded by the counsel for the State, and that if made it may apply to all the alleged causes of forfeiture. The counsel of the defendant contend that the act of February 7th, 1853, does not apply to this company, because it was enacted subsequently to the date of its charter. I think differently. It is shown in the petition that the company first organized April 16th, 1853, subsequent to the passage of the act. Their organization was the act of acceptance of the charter, and they took it subject to the provisions of all general and special laws previously made and applicable thereto. But, although the company accepted the charter encumbered with the provisions of the act of February 7th, 1853, I consider the provisions of that act, as far as they are material to this case, directory, and that a failure to comply with the requirements of it, does not involve a forfeiture, provided the company can and does show that such failure is not inconsistent with good faith towards the State, or that its condition or that of the road is such as to make the requirements of the act inapplicable to it. But if, since the organization of the company, the Legislature has, from time to time, enacted laws which recognize its existence, and which are designed to aid the execution of its trusts, such laws manifest the will of the State, that the company shall continue to exercise its franchises, and directly contravene the object of this suit.

The act of August 26th, 1856, is conceived to be such an act, and is a constructive, if not an express, waiver of all causes of forfeiture which accrued at or before that date. The act of December 19th, 1857, is such an act also. It is true, that this is a general law, but

the State can not object that its provisions were not intended to apply to this company. It certainly does embrace all railroad companies in existence, at its date. In my opinion, the waiver applies to all the alleged causes of forfeiture.

In connection with this general law, may be considered the effect of insolvency as a cause of forfeiture.

I do not consider it necessary to discuss or to declare the law, as it was prior to our legislation on this subject. Certainly, as applied to the case at bar, insolvency is not now a cause of forfeiture. By the law of December 19th 1857, the State has expressed its will, that if a railroad company is run down to bankruptcy, its charter and property may be sold, and so far from this state of facts entitling the State to reclaim the franchise, it expressly negatives it, by vesting in the purchasers at said sale, as against the State, all the corporate powers and franchises originally granted by the charter or the general laws of the land. This involves also, the conclusion that the sale alleged in the petition to have taken place on the 1st day of June, 1858, is not a cause of forfeiture. By the 4th section of the charter, the franchises of the company are made personal estate, and assignable, in the forms prescribed by law. By the act of December 19th, 1857, the railroad and franchises of the company were made the subject of sale under a Deed of Trust. The averment of the petition is, in substance, that the sale was made on the 1st day of June, 1858, under a Deed of Trust, and that J. M. Saunders, *et als.*, became the purchasers thereof. These facts, if true, establish three propositions, first:

That, if by the sale, the company was divested of its property and franchises, it was done in a mode recognized and permitted by the State, and if so, the State can not, by this suit, recover the franchise from the company. Second: That if, by the sale, the purchasers acquired, by consent of the State, said property and franchises, with the privilege of organizing as a corporate body, and exercising all the corporate powers and franchises granted by the charter or the general laws of the land; then the State can not recover the franchise from them; there being no cause of forfeiture, such as insolvency or any other matter, alleged against the purchasers; and third: the sale of the road and franchises are properly introduced, however, into the petition, because it shows the propriety of making the purchasers defendants—they claiming the property and franchises under color of title: For this, I rely upon our system of pleading and practice by which all persons having an interest in the subject matter of the suit, may and ought to be made parties.

Another cause of forfeiture, as alleged in the petition, is, in substance, that, since the organization of the company, its directors and stockholders have held no meetings within the limits of this State, but that all their meetings have been held in other States. The exception to this allegation must be sustained upon two grounds. First, the charter authorizes the directors to meet at any time or place they choose, and no law has been passed to restrain the exercise of this privilege.

Second: It is not perceived in what way the meetings of Directors and stockholders, beyond the limits of the State, are inconsistent with the spirit, meaning and objects of the charter. The trusts created by the charter must be executed within the limits of the State, that is to say, the road must be built, and the franchises must be exercised in Texas,

but meetings and consultations out of Texas, held for the purpose of providing ways and means to build the road, or for any other purpose consistent with the nature and objects of the trusts, can not, upon principles, be considered a violation of the charter.

Demurrer sustained, and judgment for the defendants.

CINCINNATI, HAM. & DAYTON R. R.

ANNUAL MEETING.

The Annual Meeting of the Stockholders of the Cincinnati, Hamilton and Dayton Railroad Company was held at the office of the Company Tuesday. The Annual Reports of the President, Superintendent, Secretary, and Stockholders' Committee were read, and a new Board was elected.

Mr L'Hommedieu said that with the completion of the Dayton and Michigan Road to Toledo, he thought the stockholders might safely anticipate a semi-annual dividend of five per cent. upon their investment. In relation to the Springfield and Mount Vernon Railroad Company, he said that the contract made and ratified with that corporation is in statu quo so far as the C. H. & D. R. R. Co. is concerned. The latter had agreed, conditionally, to take eighty-four bonds of the former, but it is probable the C. H. & D. Co. will not be called upon to comply with their agreement. The Pennsylvania Central, and Pittsburg, Fort Wayne, and Chicago Companies had taken a deep interest in the Mount Vernon Road, and had agreed to endorse five hundred of its bonds, and the road would probably be finished under this agreement. In relation to other roads, he said there is a good prospect of an arrangement with the C. & C. Road. The contract with the C. W. & Z. R. R. Co., looking to the Glendale Extension, is regarded as a "jug handle contract" for the C. H. & D. R. R., but is also considered advantageous to the former Company. To the C. H. & D. R. R. it gives the gross business of thirty miles of road—fifteen to Glendale and return. The contract was proposed by the parties interested in the former road, and was accepted by the latter.

A stockholder referred to a suit pending against the Company for a large amount, asking information. Mr. L'Hommedieu said the Cincinnati and Chicago R. R. Co. had sued some years ago, laying claim to a conditional subscription for \$300,000, but that Company had not complied with a single stipulation in the agreement, and had repeatedly offered to compromise their claim for \$10,000. The attorneys of the C. H. & D. R. R. Co. had constantly counseled the Board of Directors that a judgment adverse to the Company would be impossible. It has been and is regarded that the suit is maintained in the hope that the C. H. & D. R. R. may be induced to pay the plaintiff something to withdraw a suit which some consider has a tendency to effect the stock of the C. H. & D. R. R.

Hon. Judge Wright, one of the counsel for the Cincinnati, H. & D. R. R., corroborated Mr. L'Hommedieu's views regarding the suit, as of little consequence to the interests of the Company.

On motion the following gentlemen were appointed a Committee from the stockholders to examine the condition and management of the road during the current year, viz: John Young, Wm. Goodman, and Wm. B. Moores.

Judges and Tellers were appointed by the

President, when the meeting adjourned and the stockholders went into their annual election for Directors.

But one set of candidates—the members of the old Board—were offered, and they received the unanimous vote of the stockholders—10,172 shares being represented, viz: S. S. L'Hommedieu, Geo. Carlisle, John C. Wright, John W. Ellis, George H. Hill, Stanley Matthews, E. F. Miller, J. Shaeffer, and J. B. Varnum.

ANNUAL REPORT OF THE BOARD OF DIRECTORS.

OFFICE OF CIN., HAM. AND DAYTON R. R. Co.,
CINCINNATI, May 3, 1859.

To the Stockholders of the Cin., H. & Day. R. R. Co.:

GENTLEMEN:—The Report of the Secretary for the year ending March 31, 1859, shows the gross income to have been:

From Passengers.....	\$212,645 53	
"Freights.....	235,119 47	
"Mails and Express.....	17,617 95	
"Rents, rent of Track, etc....	24,051 97	\$489,437 92
And the Expenses of Transportation.....	239,771 43	

Leaving for Interest on Bonds, Taxes and Dividends.....	\$249,666 49
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A comparison of the gross income for the past with that of the present year will show an increase of \$2,016 65. The expenses have, in the same time, been reduced, showing a gain in the net income of \$33,778 75.

Nothing has been charged to Construction Account during the year. The amount expended for furnishing additional depot and other facilities for business, is embraced in expenses of transportation.

The report of the Secretary also shows that the floating debt of the Company has been reduced to \$24,075, consisting of Bills Payable due 1st of July next, with cash on hand to meet the same at maturity; and that the present assets exceed the remaining liabilities in the sum of \$83,268 32. About one-half of the assets, however, will not be available before the ensuing fall and spring. Under these circumstances, the Board have deemed it prudent at this time to pass the dividend.

Within the ensuing six months they will be able to resume the payment of regular dividends, and have a surplus sufficient, it is believed, to guard against any future failure.

The report made to the stockholders, at their semi-annual meeting in October last, showed that the Company had invested, in depreciated railroad stocks and bonds of connecting roads, the sum of \$305,076 10. In accordance with the recommendation of the committee appointed by the stockholders at their last annual meeting, the undivided net earnings to March 31st, 1859, have been credited to this and other bad and doubtful accounts, thus wiping out the total amount of subscription to connecting roads, and bringing the stock of this company to par on their books, after deducting sufficient of the assets to pay all outstanding liabilities. The balance remaining to the debit of stocks and bonds is \$28,747 26, which is estimated to be worth that sum, and consists of Dayton and Western bonds, due October, 1864, to amount of \$26,000, secured by a first mortgage on the bridge and tract sold that company for their entrance into and passage through the city of Dayton; of thirty shares C. H. & D. stock, and \$500 in the stock of the Middletown Bridge Company. This company have now no property on their books worth less to it than its cost.

The road has been operated with its usual regularity and freedom from accidents. No passenger has been injured, or property destroyed. The track and machinery have been

kept in good repair, and the officers and men employed in the various departments connected with the service, have been vigilant in the performance of their several duties.

Two serious accidents have occurred at road crossings, by which four persons, highly esteemed in community, have been killed. One elderly lady lost her life by walking on the track. The relatives and friends of the deceased fully exonerate the employees of the company.

The relations of our company with those in charge of connecting lines of railroads continue harmonious and satisfactory.

The Junction Indianapolis road, which connects with our road at Hamilton, will be opened for business to Oxford during the present month; and we are assured that by the first of October next the Dayton and Michigan road will be completed to Toledo. From these two connections we may expect a considerable increase of business.

The Board take occasion to congratulate stockholders on the improved condition of the company's finances, as well as for the improved prospect of an increase of business from connecting roads.

For a detailed statement of the finances of the company, and the operations of the road, reference is made to the reports of the Secretary and Superintendent, herewith submitted.

By order of the Board of Directors,
S. S. L'HOMMEDIU, President.

SECRETARY'S REPORT.

Mr. F. H. Short, Secretary, submitted a detailed statement of the financial condition of the corporation, including some facts appertaining to the superintendent's department. A statement of the passenger business, etc., of this road during the past year, showing the number of through and local passengers carried, amount received from them, the average per passenger, number of passengers carried on route, and the average amount of fare received per mile, viz:

	No. Passengers.	Amount Rec'd.	Av. per Pass'r.	Mile- age.	Av. Per Mile.
Thro' pass's.	50,744	\$55,287 60	\$1 10	2,039,009	2 69-100
Local pass's (regular)...	197,435	145,772 56	73¢	4,972,986	2 80-100
Local pass's (discount)...	12,683	4,995 37	38¢	230,049	2 12-100
Local pass's (commut.)...	78,400	6,130 00	8¢	839,855	73-100
Total.....	339,272	212,645 53	62¢	8,081,950	2 62-100

Thro' pass's to and from beyond Dayton....	22,006	\$36,133 78	\$1 64	1,320,366	2 73-100
Local betw'n Cin & Day.	25,215	43,187 90	1 71¢	1,512,900	2 85-100
Total....	47,221	79,321 68	1 69	2,833,266	2 80-100

Thro' pass's to and from West of Hamilton....	28,748	\$19,693 82	\$0 68¢	718,700	2 74-100
Local between Cin & Ham	44,835	30,701 21	68¢	1,120,875	2 74-100
Total....	73,583	50,395 03	68¢	1,839,575	2 74-100

COMPARATIVE STATEMENT OF EARNINGS FOR SEVEN YEARS, ENDING MARCH 31, 1859.

Years.	No. Passengers.	Pass. earnings.	Freight.	Mails and Express.	Total.
1852-3.	236,828	\$191,700 93	122,377 25	7,714 99	321,793 17
1853-4.	242,903	274,650 39	176,142 11	12,328 95	463,021 45
1854-5.	370,189	259,915 35	211,562 79	12,143 34	483,620 48
1855-6.	352,451	236,568 12	221,697 54	13,620 04	471,885 70
1856-7.	362,630	231,511 54	268,819 20	17,943 21	518,333 95
1857-8.	370,951	243,438 49	225,113 66	18,868 93	487,421 27
1858-9.	339,272	223,505 90	245,979 89	17,017 95	489,437 92

Whole number of tons transported on the road during the year 1858-'9, ending March 31, 182,423.

SUPERINTENDENT'S ANNUAL REPORT.

S. S. L'HOMMEDIEU, Esq., *President*:

SIR:—I submit to you a report of the operations of the road for the year ending March 31st, 1859. It affords me much pleasure in being able to show the affairs of the road in a prosperous condition.

The Passenger and Freight business has been done with promptness and regularity, and I have reason to believe has given satisfaction. The trains have been run with regularity, and no accident has occurred during the year to any passenger. The damage or injury to machinery has been slight.

During the past year we have had two unfortunate accidents at "road crossings," resulting in the death of three persons at one of the crossings, and one at the other. The accidents were caused by the deceased persons attempting to cross the track ahead of approaching trains. No blame is attributed to any one in the service of the company.

The past year, on account of a succession of rains and floods, has been a severe one on Western roads generally. The embankments of this road near Carthage and Ernst's, and at two of the bridges, sustained much injury, which have all been repaired and sufficiently protected to guard against a like occurrence.

The per centage for working the road, including all ordinary and extraordinary repairs, as per accompanying statements, is 49 per cent. In this, however, are included legal expenses to the amount of \$2,960 03; telegraph line, \$1,800; land damages, \$1,088 11. Also, judgment and costs in the case of "Seybold," \$2,227 93, which liability occurred several years since, but was never brought to a final settlement till the past year.

REPAIRS OF ROAD AND TRACK.

The expense for the year has been.....\$38,276 54
Against for last year (renewals included)..... 45,970 53

It will be necessary to provide from 500 to 700 tons of iron this summer to replace rails worn out.

It will require 20,000 new cross ties for renewals this year, which have already been contracted for, to be delivered in Dayton.

REPAIRS AND RENEWALS OF BRIDGES.

The cost of repairs and renewals has been.....\$9,264 54
Against for last year..... 4,422 85

Increase.....\$4,841 69

To this account is charged the wages of day and night watchmen; also the repairs and renewals of all the bridges.

MACHINERY—LOCOMOTIVE ENGINES.

The Company owns 22 locomotive engines, viz: 10 of the largest class for passenger service; 9 of the largest class for freight service; 2 of the smallest class for switching service, and one of the smallest class for general service.

The engines are all in good repair and running order, except three that are now in the shop undergoing slight repairs.

For the running expenses of the locomotives, including engineers' and firemen's wages, also cost of repairs, cords of wood, gallons of oil, tallow, packing, waste, and number of miles run for each engine separately, I refer you to the table appended:

The amount charged to repairs has been.....\$19,667 12
Against for last, (rebuilding engines included)..... 19,505 36

Increase.....\$161 86

Mileage of Locomotives for 1857-'58.....314,910 miles.
" " 1858-'59.....307,520 "

Showing a decrease of mileage of..... 7,390 "

Cost of repairs per mile run for 1857-'58..... 5½ cents.
Cost of repairs per mile run for 1858-'59..... 6 4-10 "

Cords of wood consumed, 7,504½, and 2,266½ gallons of oil.

PASSENGER CARS.

The Company own 26 first class passenger cars, 2 post office and second-class cars, 8 baggage and post office cars.

The cost of repairs and renewals have been.....\$11,558 28
Against for last year..... 13,781 50

Decrease.....\$2,323 22

FREIGHT CARS.

The Company own: 223 Box or Freight Cars; 91 Platform Cars; 21 Hog or Cattle Cars; 61 four-wheeled and one eight-wheeled Gravel Cars; 18 Hand Cars.

The cost of repairs and renewals has been.....\$15,499 80
Against for last year..... 16,538 51

Decrease.....1,038 71

REPAIRS OF BUILDINGS.

The cost of which has been.....\$4,404 19
Against for last year..... 4,564 22

Decrease.....160 03

OIL, TALLOW, PACKING AND WASTE.

The cost for the year for Oil, has been.....\$3,896 54
" " Tallow, Packing and Waste..... 1,984 31

Total.....5,880 75
Against for last year..... 7,438 20

Decrease.....1,557 45

FUEL—WOOD ACCOUNT.

The cost of fuel has been.....\$28,720 59
Against for last year..... 27,674 13

Increase.....1,045 46

There is charged to Locomotives.....\$24,498 78
Against for last year..... 23,369 02

Increase.....1,119 76

There is charged to Station Houses, Passenger Cars and Stationary Engines.....\$4,231 81
Against for last year..... 4,305 11

Decrease.....\$73 30

D. McLAREN, *Sup't.*

To the Stockholders of the A., H. & D. R. R. Co.

Since their last report, your committee have continued to attend to the duties assigned them. They have visited the company's office as frequently as was deemed necessary; have carefully examined the books, looked into the condition of the finances, and inquired into the police and general management of the road, and they take pleasure in being able to report that they have found every thing administered with fidelity; and believe strictly with a view to the best interests of the Stockholders.

A portion of your Committee, with some of the other Stockholders, have passed over the entire line of the road in a special train, to enable them to make a careful examination of its condition. The late heavy rains have caused some fills to give away a little, and some hill sides to slip, but nothing to interrupt its regular business. Most of the fills and embankments were found to be thoroughly settled and compact; and the bridges sound and in good condition.

Last year a very considerable expenditure was required to protect the road and some of the bridges against the floods of Millcreek. This appears to have been done in a substantial manner, and it is believed will shield the road from further encroachments of a similar character.

During the present season, some cross ties and rails will be required to be replaced with new ones. The managers of the road have this in contemplation, and have made the necessary arrangements therefor.

Your Committee have recently visited the workshops. They found everything in order, and the mechanical operations apparently economically and practically managed. No

expenditures are made except those requisite for repairing, renewing and keeping up the necessary machinery.

Notwithstanding the failure of the crops the present season, and the consequent check that it was calculated to give business, the revenues of the road have been regularly increasing since our last report, while the operating expenses have diminished. For more than a year passed, no additional charge has been made to construction account. The current repairs and renewals have been charged up to the operating expenses, and still they have been kept at less than fifty per cent. of the revenue. It is believed this may be continued.

On examining accounts of the company your committee deemed it proper to recommend that all the valueless assets be charged up to profit and loss, leaving only such to be exhibited in the statement as have a real value, and placed at such value. This recommendation was adopted by the Board of Directors, and their exhibit will show the present condition of the company's affairs. It was not, therefore, decided necessary to make out another tabular statement or a more extended report.

Your committee for the year have endeavored to discharge their duties promptly and faithfully, and will feel fully rewarded if their labors met with the approbation of the stockholders. They close them with the more pleasure from being able to give assurance that the affairs of the company have at length assumed a sound and healthy condition, which will more fully appear by the reports of the several officers.

Like most enterprises of this sort, some errors have been committed and pretty large losses sustained, all of which, however, have been repaired and overcome by the legitimate profits of operating the road. The commanding position of this line for travel and transportation, together with additions soon to be made by other connecting roads, justify your committee in predicting that hereafter the company will make regular semi-annual dividends. Respectfully submitted,

JOHN YOUNG, } Stockholders'
WM. GOODMAN, } Committee.
JNO. W. HARTWELL, }

[From the Harrison (Texas) Flag.]

S. P. R. R. MEETING.

According to previous notice, the citizens of Harrison county, assembled at the Court House in Marshall, on Wednesday, the 13th inst., to express their approbation of the compromise, which has been effected by and between the two contending railroad companies.

The meeting was organized by calling Judge Joseph Mason to the Chair, and electing Geo. L. Hill Secretary.

On motion, a committee of six was appointed by the chair to draft a preamble and resolutions expressive of the sense of the meeting, to wit: Messrs. Josiah Marshall, R. W. Loughery, Gil. McKay, W. C. Swanson, B. Smalley, and J. Whitehorn, who reported the following, which were adopted:

Your Committee, having been empowered to express the sense of this meeting, beg respectfully to report.

That the public men and the people of Texas have regarded, for many years, the project of constructing a railroad to the Pacific, with deep solicitude. That as far back as 1849, public attention was drawn to it, as a subject of commanding importance. That in 1850, a partial examination was made of the route upon the 32d parallel of latitude, running to El Paso, the result of which demonstrated the

fact that a road constructed upon that line would be much shorter, attended with fewer difficulties, and would cost at least a hundred millions of dollars less than the northern road then in contemplation. That in 1852, the Government of Texas, looking to the great advantages of such a road, running through the heart of our territory, bearing upon it not alone the commerce and travel of California, but the immense trade of our own country and of Europe with Asia; that it would pour in upon us wealth and emigration, and act as a great artery, strengthening and sustaining all other roads, thereby [enabling us to ramify our State with railroads, and develop in a few years, results which centuries have not accomplished elsewhere, and render Texas, within a brief period, in numerical strength and resources, as she is in size, the empire State of the South, made liberal provisions through her Legislature to secure this road. That in 1854, the Government of Texas, regarding with renewed favor this road, and its advantage not alone to Texas, but to the whole country, and particularly to the South, determined by a bold and liberal policy to secure it through her territory. It was her fortune to possess an unappropriated public domain of upwards of one hundred millions of acres, and several hundred millions of dollars in her Treasury. With a munificent liberality unparalleled in the history of any State in the world, she donated to this enterprise, sixteen sections of land to the mile, or upwards of eight millions of acres, destined to be worth before the road could be finished under vigorous management, sufficient to construct the road and to enrich the stockholders, and, as if this was not sufficient to invite enterprise and capital, further provided for a loan of \$6,000 per mile, in order to facilitate the rapid construction of the work.

It is deeply to be deplored that this liberal policy failed for the time in its object. The Company organized under its liberal provisions, was committed to reckless management, and lost, as it deserved to have done, public confidence.

Within the last ten days, however, a salutary change has occurred in the affairs of the company, once more reviving the hopes of the friends of the enterprise. Conflicting interests have been compromised upon a basis which will secure harmony and conjoint co-operation in the construction of the road, and a new policy, we understand, has been inaugurated, whereby the stock of the company has been scaled down to the cash value of the property, the salaries and expenses of the company have been reduced from upwards of eighty to about \$12,000, as we also understand, and such safeguards, thrown around the company as will prevent a recurrence of past mismanagement. This compromise, therefore, we have reason to hope, will result in the payment of the debts, and the prosecution of the work upon a scale commensurate with the magnificence of the enterprise. Therefore,

Resolved, That the compromise of the suit lately pending between the Southern Pacific R. R. Co., and the purchasers under the deed trust, is an event fraught with the happiest consequences to the stockholders and creditors of the company, to the people of Harrison county, of the State and of the Union.

Resolved, That whatever may have been the errors and mismanagement of this company, it has done much that is worthy of approval. Through its means a survey has been made to the Pacific, demonstrating the superiority of this route over all others; it has constructed twenty miles of railroad in Texas, and saved

the valuable charter of this incorporation to the south and to the country; a large body of stockholders have been added to it, scattered from Maine to California, composed of men of enterprise, talent, wealth and influence, thereby giving this company a commanding position; and through whose active exertions the true merits of this route have been presented with such force that they are at present universally acknowledged.

Resolved, That the errors and mismanagement of this company, are justly chargeable to the officers, agents and employees of the company, and not to the innocent and confident stockholders, who have invested their money in the enterprise, and that justice, good faith, and sound policy, demand that they should have every assurance that they can rely upon our sympathy, our kind feelings, our protection of their interests, equally with our own, and that they have nothing to apprehend from the administration of the Government of Texas or its laws.

Resolved, That this road, intended to traverse the center of our State, will be of incalculable benefit to every portion of it, and that it ought to, and we believe will, receive the aid and encouragement of the people of Texas, *en masse*.

Resolved, That the friends of this enterprise, entertain no jealousy, and recognize no conflict of interest with this and any other road in the State or the South, and that they desire the cordial co-operation of all.

Resolved, That the recent difficulties which have embarrassed the company, have had the salutary effect of drawing public attention throughout the Union, to the superiority of this route, and to the munificent donations of Texas supporting it, and under proper management for the future, will redound to the good of the enterprise.

Resolved, That a railroad to the Pacific is a settled conviction, in the public opinion of the country, and with this company free of debt, with a property of two millions of dollars, and a stock list representing that value, it will be in a condition to go before the next Congress, with every prospect of securing aid from the Federal Government.

Resolved, That we deem the present prospects of the great enterprise, better and brighter than at any former period of its history, and that the State suit, for a forfeiture of the charter, is the only cloud impending over them.

Resolved, That whilst we do not doubt that Gov. Rannels was influenced by pure and patriotic motives, in directing the institution of said suit, we have as little doubt that he would, under existing circumstances, subserve the best interests of the State, by ordering its dismissal, and this is our opinion, irrespective of the question, whether an act of forfeiture has been perpetrated or not.

Resolved, That the Secretary forward to the Governor and Attorney General a copy of the proceedings of this meeting as soon as he conveniently can.

The following named gentlemen addressed the meeting: Judge D. S. Jennings, Gen. R. V. Richardson, J. Marshall, Esq., Col. W. T. Scott, Geo. Lane, Esq., Col. W. H. Bristow, and P. Murrah, Esq.

It was moved and carried, that the proceedings of this meeting be published in the Texas Republican, and Harrison Flag, and that all papers friendly to the enterprise, be requested to copy.

On motion the meeting then adjourned.

JOSEPH MASON, *Chairman*.
G. L. HILL, *Secretary*.

SOUTHERN PACIFIC R. R.—The terms of compromise between the two companies, as we learn, are as follows: The old company are to pay in cash all judgments existing against them. This has been done. They are to pay in four months \$23,000 of judgments obtained against the new company at the late term of the District Court. They are to pay \$50,000 in cash in thirty days, and \$50,000 more within ninety days after the final disposition of the State suit, the remainder of the debt within one and two years from the date of the same event. The old company immediately enter upon the privilege of working upon and repairing the road, and using the locomotives, cars, and road at pleasure, for purposes of construction and repairs. Whenever they furnish to the new company such commercial paper as shall be approved by Messrs. Payne & Harrison, of New Orleans, for the two installments of \$50,000 each, they are entitled to a final transfer of the road, stock, fixtures, franchises, books, &c., and the new company ceases to exist. The old company is, in that event, to execute a lien upon the road, for the deferred installments.

The whole amount of indebtedness, including the work and labor done by the new company, since the purchase, which this arrangement agrees to pay, is about \$360,000, against which there is to be a credit for all debts against the new company, which they may have to pay hereafter. A list or schedule of the debts assumed is made out, and attached to the articles of agreement.

We are assured that the best feeling exists in Texas, between those who were recently at dagger's point in their quarrels over disputed claims. The past has been forgotten in a union of effort to extricate this road from embarrassments which threatened to destroy it. Nearly all the members of the new company are co-operating faithfully, and some zealously, with Dr. Fowkes, in removing all obstacles to the enterprise, and facilitating its rapid advancement.

We hear that an indebtedness of about \$130,000 will be merged in the stock of the company, releasing it from the obligations to pay that sum in money.

Other grounds for satisfaction are furnished in the information that a new and economical policy has been introduced into the administration of the company. The stock issues have been cut down to their par value. The salaries of the official corps have been reduced to a sum little greater than that formerly paid to the President alone.

THE CANAL.—Navigation is perfect the entire distance through the Erie Canal. Saturday afternoon the first boat from New York, the *Hardware*, belonging to the Western Transportation Company, arrived here with a load of seventy-two tons of merchandise. She is the forerunner of a considerable fleet, some of which may have reached the city this evening.

If we are not mistaken, this is the first instance on record, since the enlargement commenced, at least, of boats passing through the entire length of the Canal, at the Spring opening, without detention from breaks or other mishaps. The first trip usually occupies two or three weeks' time, whereas we have this season a boat through in eight days from the opening. Goods this year, transported by the Canal, will be delivered in Chicago and other Western ports on or before the first of May. Heretofore they have not often been laid down at the West before the first of June.—*Buffalo Express*, April 25.

IMPORTANT RAILROAD DECISION.

The following important decision was recently pronounced by the Hon Judge McLean, in the case of the Richmond and New Castle Railroad:

Circuit Court of the United States, District of Indiana.

CARLISLE VS. BUNDY *et al.*—This bill is filed by George Carlisle, as trustee, who, with others, represents that under the law of Indiana, of 1847-'8, the New Castle and Richmond Railroad Company had power to negotiate loans, contract debts, and give liens on all property and effects of the Company, and by a subsequent act of January, 1851, the Company was authorized to borrow money and issue bonds therefor, and to secure the payment thereof; to mortgage the road, income and other property of the Company, etc. That under the above and other acts of the Legislature, the following mortgages were executed:

1. The New Castle and Richmond R. R. Co., to Carlisle & Varnum, \$300,000 on twenty-seven miles of the road, dated 25, Feb. 7, 1852.

2. The Cincinnati, Logansport and Chicago R. R. Co., to Carlisle, (Hamilton and Riggs,) 300,000 pounds sterling on the whole road, dated 1st of April, 1853.

3. To Bundy and White for \$300,000, by the Cincinnati and Chicago R. R. Co.

On the 31st of August, 1854, the Cincinnati, Logansport and Chicago Railroad Company, by an act of the Legislature of the State, consolidated with the Cincinnati & Chicago Railroad Co.

In April, 1858, George Carlisle filed a bill in this Court, alleging that the interest had not been paid on the bonds secured by the deed of trust to him, Riggs and Hamilton, praying for a decree for the sale of the road and machinery, etc.

In November, 1854, the consolidated Company executed a deed of trust to Martin L. Bundy, conveying to him some real estate, and a number of locomotives and cars, for passengers and freight, as a security for the payment of certain debts which the Directors of the Company had incurred to stock the road. The debts thus contracted by the Company and others, to put the railroad in operation, are alleged to have amounted to eighty thousand dollars. And the trustee Bundy, on a failure to pay the debts as they fell due, by the company was authorized to sell the property, specified in the deed of trust, "or so much thereof as shall become necessary to pay the debts provided for in the deed of trust."

It is averred that none of the property conveyed to Bundy, was owned by the Company, when the deed of trust was executed to Carlisle, Riggs and Hamilton. The cars embraced in the Bundy mortgage, are alleged to have been in an unfinished state, and in the possession of the manufacturers, and had never been placed on the road when this deed of trust was executed.

In August, 1857, Bundy commenced a suit in the Wayne Circuit Court of Indiana, for the purpose of recovering possession of the property conveyed to him by the deed of trust, and which by the deed was required to be sold, and this property he alleged in his bill, to be in the possession of J. W. Wright & Co., who claimed it under a lease from the Company, executed in October, 1857, some two years after the deed of trust to him.

In this suit Bundy did not claim a judgment against the Railroad Company, or against those who claimed the property as lessees, and also had possession of it; but he prayed for a decree that the possession of the property should be given to him, that he might proceed to sell, and apply the proceeds in payment of the debts specified in the deed of trust.

J. W. Wright & Company admitted they had the possession of the property, and they set up numerous defences to the suit. But Carlisle, and the other Trustees associated with him, were not made parties, and it is alleged that the only point before the Indiana Court in that case, in regard to the property, was the right of Bundy under the deed of trust.

In their opinion, the Wayne Circuit Court say this suit is brought by Martin L. Bundy, the Trustee, to obtain a foreclosure and order of sale upon a trust mortgage, against the Cincinnati and Chicago Railroad Company—the mortgagor and Wright and others, her lessees, having in possession and use the property covered by the trust mortgage. The Railroad Company made default.

In the further progress of the case, the Court say—"Subsequently the Railroad Company—Bundy being one of the Directors—leased the trust property mortgaged to Wright and others for five years. Before the expiration of the five years, the claims of the creditors, the beneficiaries of the trust mortgage, became due, were not paid, and the Trustees, for their benefit, obtained an order for the sale of the property. The lessee pleaded the act of the Trustee in participating in the lease to them, as an estoppel in pay of his right to foreclose and sell the property; and the Court say, we do not think the estoppel arises upon the facts. And the Court, in conclusion, say, the "lessees had notice, by the record of the trust mortgage, of the extent of interest possessed by the respective parties, and of the liability to which they might be exposed of having the property taken from them, in the contingency that the secured creditors should not be otherwise paid, and should press the collection of their claims," etc. "The result," say the Court, "at which we have arrived as to the validity of the plaintiff's claim, under the trust mortgage, renders it unnecessary that we should inquire into the validity of the lease to Wright and others."

An elaborate opinion was pronounced in the Supreme Court, to which the above cause was appealed, from the Circuit Court of Wayne county; and on petition for a rehearing in the Supreme Court, the case was again elaborately considered, and the re-hearing was denied.

The mortgage or deeds of trust were issued to Carlisle & Varnum in 1852, and in 1853 to Carlisle, Hamilton and Riggs. Those issued to Bundy and White, the date is not stated. But the first, second and third mortgage also, it is presumed, were issued prior to the Bundy mortgage, which is called the fourth mortgage. This was dated November, 1854.

In August, 1857, suit was brought on the Bundy mortgage in the Wayne Circuit Court. The suit by Carlisle and others on the original trust bonds was commenced in April, 1858. From this it appears that the suit on the Bundy mortgage, was some nine months before the commencement of Carlisle suit in this Court.

From the Record of the Wayne Circuit Court, there was no appearance by Carlisle or any one else in the Bundy case, except by Wright and Company, as the lessees of the Railroad Company.

That the Wayne Circuit Court of Indiana, is a court of general jurisdiction is admitted, and it appears the suit in that court was prosecuted to a final decision, and that Wright & Co. took an appeal to the Supreme Court of the State, and that on the 25th of December, 1858, a final decision was given affirming the decision of the Wayne Circuit Court. And that afterwards on a petition for a rehearing, the case was again elaborately considered and the motion was overruled. And it further appears the validity of the Bundy mortgage was the turning point of the decision in that case, both in the Circuit and Supreme Court of the State.

There is no principle better settled than that when Courts having concurrent jurisdiction the one that first exercises jurisdiction by a service of notice, has possession, of the case, and may decide it.

It is also a well settled principle, that no Court which is not vested with an appellate power, can modify or reverse a decision of a Court, when jurisdiction has attached.

These principles are not controverted, but admitted by the counsel in the case.

It is also an admitted principle, that an individual or a corporate body, though interested in a suit, if not made a party, his rights remain unaffected by the procedure. There are cases where a Court, having jurisdiction of the person, may coerce him to do certain things which justice requires, though not strictly within the jurisdiction; as where a conveyance of land may be required to be made out of the State, or where an individual acts in different capacities, as representing distinct interests. Bundy, it is alleged, acts as co-trustee with White of the third mortgage; and he is sole trustee of the fourth mortgage; is plaintiff in the Wayne Circuit suit, is special Commissioner of that court to sell, and is co-dependent with White in the Carlisle suit to foreclose, and in that capacity has answered and filed a cross bill; and that he is defendant in the Carlisle suit to foreclose in his capacity of trustee of the fourth mortgage.

In answer to these facts, in regard to the fourth or Bundy mortgage, it is enough to say, that the suit on that instrument having been first commenced in the Wayne Circuit Court, which exercises a concurrent jurisdiction with this Court, its decision must stand on all matters properly adjudicated, unless reviewed and reversed by the appellant Court of the State.

It is true, in his supplemental bill, Carlisle alleges that Bundy is about to take possession of and sell the machinery embraced in the deed of trust to Riggs, Hamilton and himself, and that the sale of property would be an irreparable injury to the road.

The decree in the Supreme Court of Indiana in favor of Bundy, is in a nature of a proceeding in rem, and requires him under the deed of trust, to sell the property, and pay the debts specified. We are bound by this decree, and it is difficult to perceive how we can in any manner, interfere by an injunction, without a direct conflict with the Indiana court. An injunction which shall not restrain the action of that Court will answer no purpose. It is said we may act upon the person of Bundy, without interfering with the Indiana Court. How this can be done is not perceived. If we say that Bundy shall not sell, and nothing short of that will answer the purpose, we nullify the action of that Court. We say that he shall not do the thing which the Supreme Court of Indiana have commanded him to do.

If judgment at common law had been rendered for money, this Court might have protected any property, on which there was a prior or specific lien, from execution. But when the decree is entered for sale of specific property, it remains in the custody of the Court; and it cannot be reached by an injunction, or other proceeding, except by a Court having an appellate power.

It is said "that the question between Carlisle and Bundy, now pending before this Court was never directly or indirectly passed upon by the Wayne Circuit Court. That is a new case and between different parties. And that it is not proposed to disturb a single question settled by that Court. And it is alleged that the relative rights of Carlisle and Bundy were not determined by the Supreme Court of Indiana, and could not be as Carlisle was not a party in that suit."

It must be admitted that the bill filed by Carlisle, and those associated with him, was filed in this Court, primarily, against the Cincinnati and Chicago Railroad Company, to enforce the payment of interest which had become due and was not paid, and if need be, to foreclose the mortgage on the road and sell it, including its entire property. And that Carlisle filed a supplemental bill, subsequently, in reference to the mortgage set up by Bundy, alleging it to be fraudulent and void.

It is not denied that this Bundy mortgage purports to cover the entire property which was brought before the Wayne Circuit Court of Indiana, and was appealed to the Supreme Court of the State, which affirmed the decree of the inferior Court. And the property embraced in the mortgage was ordered to be sold, by the final decree of the Supreme Court. And it seems to be admitted that, under the mortgage, the property will not sell for the amount of the indebtedness claimed,

That a subsequent incumbrancer may be made a party to a suit on a prior mortgage, may be admitted. But the question made is whether a subsequent incumbrancer, as in the case of Bundy, on a mortgage of personal property in which the items are enumerated, and directed to be sold, by the decree of State Court, can be enjoined by the Federal Court. I can not perceive how this can be done. Under the same jurisdiction, there could be no difficulty in staying the proceedings. But by this Court no step can be taken which would not bring it directly in conflict with the State Court. To issue an injunction against the person of Bundy, without interfering with the decision of the Supreme Court of Indiana, is impossible. The decree is the final action of that Court, through Bundy, its trustee, and should he attempt to prevent or defeat the purposes of the decree, he would be liable to be attached and punished by the State Court, and there is no power in the Court to protect him. We claim only a concurrent jurisdiction with the State Court, and in this case the jurisdiction of the State Court attached before Carlisle filed his bill in this Court. If, as above remarked, a judgment at law had been entered against the Railroad Company, and an execution under that judgment had been levied, and properly mortgaged, the lien might be asserted in this Court. But this would not call in question the validity of the decree of that Court, as the levy, being the act of the officer, might be enjoined.

But Carlisle not being made a party in the act of the State Court can not be materially affected by that decision. If he have prior liens to the Bundy mortgage, they may be enforced against the specific property, into whatsoever hands it may come. There could be no doubt as to the notice from the recorded mortgages and the suits in this and the State Court.

In the case of Coe vs. Hart *et al.*, (Am. Law Register, Nov. 1857,) this Court held, where several passenger and other cars had been constructed and delivered to the Railroad company, that the lien on subsequently acquired property, attached, under the mortgage. And, again where a Bridge was constructed over the Muskingum, at Zanesville, on the Wilmington Road, it was held that the constructor of the Bridge might refuse to deliver the Bridge to the Railroad company, unless security was given on it for the balance due, and that a mortgage so given was valid.

This ruling was not founded on a mechanic's lien or any statutory provision, but on the principles of the common law that the constructor of a bridge, a locomotive, passenger cars, or other structures for the road, there being no special contract for the payment of the work, the constructor may refuse to deliver it to the Railroad Company, until it shall be paid for, or the payment satisfactorily secured. But where no special lien is given on the work, and it is delivered to the Railroad, the constructor can only be considered as a general creditor of the company. I know no other principle on which proper protection can be afforded to these great improvements, which have added a hundred per cent. or more to the general products of our country, and to the commercial facilities afforded by them. When a sale of the road shall be indispensable, it should take place under such circumstances, as to enable a Court to adjust the equities between the respective parties.

Mr. Carlisle may stand upon his liens, or he may, at his option, investigate the merits of the Bundy mortgage in the State Court.

The prayer for an injunction is refused.

MICH. SOUTHERN AND NORTHERN INDIANA R. R.

The liabilities of the Company March 1, 1859, and January 1, 1858, compare as follows:

	March 1, 1859.	March 1, 1858.
Capital Stock.....	\$8,975,400 00	\$8,876,400 00
Funded Debt.....	9,343,000 00	8,543,000 00
Floating Debt.....	1,277,007 00	1,334,444 44
Total.....	\$19,595,407 00	\$19,403,844 44

The gross traffic earnings for the year ending December 31, 1858, from all sources, have been:

From Passengers.....	\$920,174 43
From Freight.....	872,419 14
From Mail, Express, etc.....	226,831 39

Total receipts..... 2,019,424 99

The working expenses have been:

For maintenance of Way.....	\$335,578 45
For repairs of Engines and Cars.....	167,297 95
For Transportation, etc.....	739,314 83

..... 1,242,192 23

Net earnings..... \$777,272 73

The business of the road and branches for the year 1858 compare with 1857, as follows:

Earnings from—	1858.	1857.
Passengers.....	\$920,174 43	1,316 478 21
Freight.....	872,419 14	803,762 36
Mails, etc.....	226,831 39	189,246 73
Total.....	\$2,019,424 99	2,309,487 30

W'g Exp's.....	1,242,152 23	1,765,176 11
Net earnings.....	\$777,272 73	544,311 19

Dec. 1858, \$396,303 78
Inc. 68,636 78
Inc. 37,584 66
Dec. 529,062 34
Dec. 523,023 88
Dec. \$222,961 54

The equipment of the road consists of 91 locomotives; 76 first class passenger and 32 second class and emigrant cars, 3 drover's, 1 paymaster's, and 23 mail and express cars, 568 box freight, 105 stock, 273 platform, 2 wrecking, and 28 gravel cars. In all 1,111 cars.

We give below the mileage of trains and a few additional facts of operation for the year 1858, compared with 1857:

Twelve Months.	1858.	1857.
Length of road operated.....	525	539
Miles run by passenger trains.....	637,918	684,048
Miles run by freight trains.....	606,441	544,396
Miles run by other trains.....	130,610	141,159
Total number of miles run.....	1,374,969	1,569,603
Average miles run by each engine.....	15,169.87	17,440.13
Number of passengers carried.....	462,969	534,549
No. of passengers carried one mile.....	33,948.738	53,866.963
Number of tons of freight carried.....	261,613	234,704
Tons of freight carried one mile.....	30,890.469	28,467.676
Total receipts per mile run, cents.....	1.46	1.47
Total expenses per mile run, cents.....	0.90	1.12
Per centage of expenses to earnings.....	61.50	76.43
Maintenance of way per mile run, cts.....	24.40	30.23
Repairs of engines per mile run, cts.....	5.46	10.11
Repairs of cars per mile run, cts.....	5.46	9.37
Cost of fuel per mile run, cts.....	7.28	10.44
Gross earnings per mile of road.....	\$3,846.62	\$4,284.74
Net earnings per mile of road.....	1,480.51	1,069.85
Net income per cent. on cost of road.....	4.82	3.41

DELAWARE AND HUDSON CANAL COMPANY.

The following circular in reference to the affairs of the Delaware and Hudson Canal Company has been sent to the stockholders:

OFFICE DELAWARE AND HUDSON CANAL CO.,
New York, April 5, 1859. }

It having been stated in certain quarters that this company has been able to pay its large dividend only by adding to its debt, the following facts and figures are submitted for the information of those interested:

The enlargement of the Canal was completed and the construction account therefore closed in 1858.

On the 1st of March, 1853, the debt of the Company funded and floating was.....	\$656,905 47
The available cash assets were.....	\$54,445 73

Excess of assets over debt.....	\$197,540 26
On the 1st of March, 1859, the debt of the Company, funded and floating, was.....	\$1,292,717 35
The available cash assets were.....	1,036,408 98

Excess of debt over assets.....	186,368 37
---------------------------------	------------

Actual increase of debt in six years, from 1853 to 1859.....	\$383,848 63
During these six years there was paid to the stockholders in cash.....	4,498,500 00
Excess paid to stockholders in cash, over the increase of debt.....	4,114,651 37
During these six years the capacity of the Company's railroad has been doubted, at an expense of.....	750,000 00
"T" rail substituted for flat rail, do. do.....	100,000 00
The road extended six miles, do. do.....	225,000 00
	\$675,000 00

In addition to the above, three hundred thousand dollars have been expended on the canal, for walling and other improvements, during the same period, and every department of the work has been placed in a high state of sufficiency.

GEORGE T. OLYPHANT, President.

EDGEFIELD AND KENTUCKY RAILROAD.—The third annual report of the Board of Directors of the Edgefield and Kentucky Railroad Company to the stockholders has been laid on our table. The President, E. S. Cheatham, Esq., reports that the entire road, from this city to the Kentucky line, will be in successful operation by the first day of September next, and will then take its place among the prominent improvements of the country.—*Nashville, (Tenn.) News, 12th inst.*

MONETARY AND COMMERCIAL.

The easy condition of money matters, noticed in our last review, still continues, and we may reasonably expect that this state of things will continue until the heavy demands of the fall trade, with but slight fluctuations. Good paper is all absorbed by the regular houses at 9 to 12. The supply of first class paper is limited, and large surpluses will remain inactive. The present favorable weather for plowing and planting instills new confidence in an abundant harvest, and consequent large fall trade.

Eastern Exchange is scarce and firm, with an improved tendency. We quote—

	BUYING.	SELLING.
New York Sight.....	45@50 prem.	½@½ prem.
Boston.....	40@45 prem.	½@½ prem.
Philadelphia.....	45@50 prem.	½@½ prem.
Baltimore.....	40@45 prem.	½@½ prem.
New Orleans.....	½ prem.	½ prem.
American Gold.....	40@45 prem.	50 prem.

The New York Tribune, of the 28th ult., says:

There was considerable discussion at the Second Board today in relation to the rights of stockholders of railroads to come in in case of foreclosure, with the purchasers, by paying pro rata their portion of the amount for which the road sold. The act which authorizes this was passed June 30, 1853, and, for the information of the parties interested, we annex the two sections, of which it consists:

1. Whenever default shall be made by any Railroad or Plankroad Company, in the payment of principal or interest of any bonds of such Company which are secured by a mortgage of the property of such Company, it shall be lawful for each and every stockholder of such Company, at any time during the process of such foreclosure, to pay the mortgagees named in such mortgage, for the use and benefit of the holder and holders of such bonds, such a proportion of the sum due and the sum secured to be paid by the whole of the bonds secured by such mortgage, as such stockholder's stock shall bear to the whole stock of said Company; and on so paying such stockholder shall, to the extent of such payment, become and be interested in such mortgage, and protected thereby.

2. In case of the foreclosure of any mortgage given by any Railroad or Plankroad Company to secure the payment of any bond of such company, any stockholder of such company shall, for the period of six months after the sale under such foreclosure, have the right on paying to the purchaser or purchasers at or under such sale, or to the mortgagees named in such mortgage, for the use and benefit of said purchaser or purchasers, a sum equal to such proportion of the price paid on such sale, and the costs and expenses thereof, as such stockholder's stock in said company shall bear to the whole capital stock of said company, and on so paying, such stockholder shall be entitled to have the same relative amount or interest in said Railroad or Plankroad Company and its road, franchises and other property.

We understand this to mean that if the Erie Road should be sold under foreclosure under the fourth mortgage for, say \$1,100,000 and the previous liens, any holder of 100 shares of the stock would have the right to furnish \$1,000 of this amount and come in with the purchasers. Should such contingency happen, the present buyers of Erie at 47, under a cost of \$17 per share, would own the property, with the mortgage liens of \$13,000,000, and an aggregate cost of \$14,100,000. This act certainly gives stockholders of railroads a valuable privilege, and places them ahead, in that respect, of all unsecured creditors.

NEW ORLEANS, Monday, May 2

SOUTHERN PACIFIC R. R.—President Fowlkes publishes a report of the proceedings of the Board of Stockholders of the Pacific Railroad. The stock is to be reduced to a million and a quarter; the stockholders being required to surrender half of the present issue. Fowlkes has gone to Memphis; he holds a meeting there; also at Louisville and elsewhere.

NEW ORLEANS AND OHIO RAILROAD.—One of the officers of this Road in a letter to us says: "Our road is now let out to strong contractors, and they have a large force at work, several hundred men. In the ensuing year we calculate on a full completion of the road, and from the earnings to Mayfield—twenty-six miles—we feel justified in the belief, that it will be one of the best paying roads for the length in the whole country. We are now earning say \$2,000 per month, running expenses \$640 per month, and to the connection with the Mobile Road, the increase of running expenses will be a mere trifle."

SOMETHING WORTH SEEING.—At the office of the Sonora Exploring and Mining Company, in Tubac, a few days since, we saw a bar of fine silver, which was being boxed up, preparatory to shipment to New York, via Overland Mail. This bar was number seven, since the amalgamation works have been put in operation, or rather a portion of them; it was fifteen inches long, five inches wide, two and one-half inches thick, and weighed 889-38 ounces, its value being \$1,134 84. This bar was the result of three day's work of two amalgamation barrels. This is tangible evidence of successful silver mining, and even with only one quarter of the amalgamation works in operation the company will hereafter turn out at least two such bars as the above per week. People who are incredulous about silver mining in this Territory would doubtless be edified and comforted by a sight of a lump of pure bright silver weighing nearly nine hundred ounces, assayed and stamped with its value, ready for the mint, or the silversmith. It was something worth looking at. The bar was shipped to W. T. Coleman & Co., New York.—*Arizonian.*

EXTENSION OF THE A. V. RAILROAD.—The Board of Directors of the Allegheny Valley Railroad, at their meeting last evening, determined to extend this road to the mouth of Mahoning Creek, eighteen miles north of Kittanning, in Armstrong County. To accomplish this purpose they resolve to issue second mortgage bonds, which will enable the management immediately to put the work under contract, and insure its early completion. There are parties in readiness who are willing to do the work and take their pay on second mortgage bonds. The Board, in order to insure entire unanimity and co-operation, resolved to submit this proposition to the stockholders, who will be called upon in fifteen days to accept or reject the action of the directors.—*Pittsburg Press, 27th.*

RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, at shipping ports in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON & CO.

New York, Ap 2, 1856. 9 South William Street.

G. G. LOBDELL. H. S. M'COMBS. D. P. BUSH.

BUSH & LOBDELL,

Wilmington - - - - - Delaware.

MANUFACTURERS OF

CHILLED WHEELS

AND

TIRES,

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Ext. nt

FOR THEIR

CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE.

WITH OR WITHOUT AXLES.

WHEELS FITTED

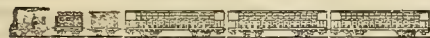
To Hammered or Rolled Axles,

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

CHICAGO, Great Western and North-Western ROUTE.

INDIANAPOLIS & CINCINNATI SHORT LINE



RAILROAD.

(VIA LAWRENCEBURG.)

Distance 110 Miles and No Change of Cars Between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS LEAVE CINCINNATI daily, (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6 A. M.—Chicago and Terre Haute Day Express—Through to Terre Haute, Lafayette, and Chicago, with but one change of cars.

SECOND TRAIN, 4:15 P. M.—Accommodation—The 4:15 P. M. train arrives in Indianapolis at 10:10 P. M.

THIRD TRAIN—Chicago and Terre Haute Night Express—8 P. M.—Arrives at Indianapolis at 1 A. M. This train runs through from Cincinnati to Chicago, with but one change of cars.

The above trains make close connections at

Indianapolis, Lafayette and Chicago.

WITH TRAINS FOR

Terre Haute,	Lafayette,
Springfield,	Jacksonville,
Rock Island,	Danville,
Galesburg,	Burlington,
Kenosha,	Milwaukee,
Mattoon,	Pana,
Naples,	Peoria,
Galeana,	Dunleith,
Quincy,	Racine,
Prairie du Chien,	Decatur,
Blomington,	Joliet,
LaSalle,	St. Paul,

And all towns and cities in the North-west.

Connections are also made at Indianapolis with the Peru and Indianapolis Railroad for Kokomo, Peru, Logansport, Fort Wayne, Toledo and Detroit.

Be sure you are in the right Ticket Office before you purchase your ticket, and ask for tickets

Via Lawrenceburg & Indianapolis.

THROUGH TICKETS.

Good until used, may be had at the Company's Offices, north-west corner Broadway and Front Streets, under Spencer House.

No. 1 Burnet House, north-west corner Third and Vine Streets.

Also at the Walnut Street House.

J. S. SHACKELFORD, Ticket Agent.

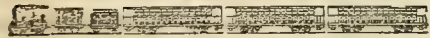
And at the Depot, where all necessary information can be had.

H. C. LORD, President.

W. H. L. NOBLE, General Ticket Agent.

Commencing April 10, 1859.

OHIO & MISSISSIPPI



RAILROAD.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCENNES, Cairo, and St. Louis, at 8:30 A. M., and 8:30 P. M.

Accommodation train at 5 P. M.; for Evansville at 8:30 P. M.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natches and New Orleans.

One Through Train on Sunday, at 8:30 P. M.

RETURNING.—FAST LINE—Leaves East St. Louis, (Sunday excepted) at 7 A. M., arriving at Cincinnati at 10:10 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 2:40 P. M., arriving at Cincinnati at 7 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the offices: Walnut Street House, bet. Sixth and Seventh Streets. No. 1 Burnet House, corner office; north-west corner of Front and Broadway; Spencer House Office; and at the Depot, corner of Front and Mill Streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for Passengers.

Commencing April 11, 1859.

LITTLE MIAMI —AND— COLUMBUS AND XENIA RAILROAD.

FOUR TRAINS DAILY.

Three Through Express Trains.

FIRST TRAIN—No. 1 Express, at 6 A. M., connects via Columbus and Cleveland; via Columbus, Crestline, and Pittsburg; Detroit via Cleveland and Steamers. This train stops between Cincinnati and Columbus, at Loveland, Deerfield, Morrow, Xenia, Cedarville, South Charleston, London, and West Jefferson.

SECOND TRAIN—No. 2 Express, at 8 A. M., connects via Columbus, Bellair, and Benwood; Wheeling, via Columbus, Steubenville, and Pittsburg; via Columbus, Crestline, and Pittsburg; via Columbus and Cleveland; Detroit, via Cleveland and Steamer; Springfield. This train stops between Cincinnati and Columbus at Plainville, Milford, Loveland, Morrow, Spring Valley, Xenia and London.

THIRD TRAIN—Accommodation, at 4:40 P. M., for Columbus and Springfield.

FOURTH TRAIN—Night Express, at 11:30 P. M.; connects via Columbus, Bellair, and Benwood; Wheeling; via Columbus, Steubenville and Pittsburg; via Columbus, Crestline and Pittsburg; via Columbus and Cleveland. This train stops at Loveland, Morrow, Corwin, Xenia and London. Sleeping Cars on this Train.

No. 1 Express through to Cleveland without change.

The Night Express Train, leaving Cincinnati at 11:30 P. M., runs daily, except Saturdays. The other trains run daily, except Sundays.

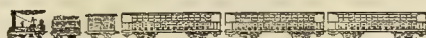
For all information and Through Tickets to Boston, New York, Philadelphia, Baltimore, Washington, Buffalo, Niagara Falls, Dunkirk, Cleveland, Pittsburg, Wheeling, and all Eastern places, please apply at the offices, Walnut Street House, No. 1 Burnet House, south-east corner of Broadway and Front Streets, and at the Eastern Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Superintendent.

Omnibuses call for passengers by leaving directions at the Ticket Office.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE.

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads. Steamers, etc., for and from all points in the

West, South-West and North-West.

Fare to New York and Boston ONE DOLLAR less than via any other route.

TWO TRAINS

Leave Wheeling daily at 8:05 P. M., and 11:30 A. M.

Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.

Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2.

Quick time and sure connections.

Inquire for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

E. F. FULLER,

General Western Agent.

L. M. COLE,

General Ticket Agent.

W. P. SMITH, Master Transportation.

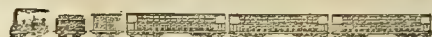
WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, STROBRIDGE & CO.,
119 Walnut st., Odd Fellows' Building

April 11, 1859.

Cincinnati, Hamilton and Dayton,



RAILROAD.

FOUR TRAINS

LEAVE THE SIXTH STREET DEPOT DAILY.

TRAINS RUN THROUGH TO RICHMOND, LIMA, SANDUSKY, AND DELAWARE WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND NORTH-WESTERN CITIES.

6 A. M. EXPRESS TRAIN—For Cleveland and Pittsburg, via Delaware, makes close connection at Crestline for Pittsburg, Baltimore, Philadelphia, and New York; and at Cleveland for Dunkirk, Buffalo, Boston and New York. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Munice. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

8 A. M. MAIL TRAIN—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STEAMER FOR DETROIT; at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at DELAWARE with the C., C. and C. Road, for Cleveland and points East.

4:30 P. M. TRAIN—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Connects, also, at Dayton for Troy, Piqua, Sidney, Lima and Chicago. Also connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago.

6 P. M. TRAIN—For Dayton and all way stations.

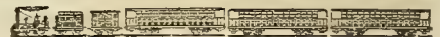
For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; No. 3 Burnet House; or at the Sixth Street Depot.

D. McLAREN, Superintendent.

New Time Table

OF THE

NEW YORK CENTRAL R. R.



Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp. 7:00 A. M.	7:00 P. M.	7:00 P. M.
Mail 9:00 A. M.	12:50 A. M.	
New York Exp. 11:15 A. M.	9:40 P. M.	9:00 P. M.
Night Exp. 5:00 P. M.	4:00 A. M.	4:00 A. M.
Utica Accom'n. 6:00 P. M.	Ar. U. 10:00 P. M.	
N. Y. Mail 11:15 P. M.	10:00 A. M.	10:00 A. M.
Leave Buffalo.	Leave Bridge.	Ar. Alb'y.
New York Exp. 5:15 A. M.	5:15 A. M.	3:30 P. M.
Steamboat Exp. 8:00 A. M.	8:00 A. M.	8:00 P. M.
Mail 11:15 P. M.		2:30 P. M.
Cleveland Exp. 6:00 P. M.	6:00 P. M.	4:40 A. M.
Cincinnati Exp. 11:00 P. M.	11:00 P. M.	8:30 A. M.
Utica Accom'n. 11:15 P. M.		10:00 A. M.

AMERICAN AND FOREIGN PATENT AGENT.

THOMAS D. STETSON,

SOLICITOR OF PATENTS,
And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about lbs. per yard, "Eric" pattern, of best quality Welsh make, now ready for delivery, for sale by
March 18-59. V. VOSE, LIVINGSTON & CO.,
Feb. 25, 59. 9 South William St., N. Y.

Union Works, Baltimore.

POOLE & HUNT, Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.
WHEELS AND AXLES fitted for use.
HYDRAULIC PRESSES for pressing Oils and for other purposes.
MACHINERY of the most approved construction for Flouring and Saw Mills.
GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.
STEAM BOILERS and WATER TANKS of any size or description.
SHAFTING, PULLIES and HANGERS.
WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap2

ANDERSON, GATES & WRIGHT, STATIONERS, BOOKSELLERS, —AND—

Blank Book Manufacturers,
No. 112 MAIN STREET,
East Side, between Third and Fourth Streets,

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,
Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,
(Successors to Jacob Ernst.)
112, Main Street, Cincinnati

SCHENECTADY Locomotive Works, SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,

AND TENDERS, AND
RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding the work to any part of the country, without delay.

JOHN ELLIS, Agent.
WALTER McQUEEN Sup't. 4ut61y
N. B.—We have two Freight Engines on hand suitable for the 4 feet 10 in. gauge Cylinders 16 inches diameter, 22 inches stroke. Driving wheels 4½ feet diam. December 18th, 1853.

D. M. CARHART, TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address, Respectfully Yours,

D. M. CARHART,
Box 183, Cleveland, Ohio.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
Removed to No. 67 West 6th St.
CINCINNATI, O.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Book-sellers, Country merchants, and others to our extensive stock of school, Classical, Theological, Scientific, Standard, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the leading publishers, as well as the principal manufacturers and importers of Paper and Stationery, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

BOOKSELLERS,

Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, Envelope, Manilla and Tea wrap-boards, Envelopes, Penholders, Copying Books, Ink and surs, Sealing Slates, Mucilage, Book rests, Bill envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files; Date Calendars, together with all other articles used in the counting-house.

Stationers,

To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly paged, including all sizes, from the small memorandum book to the large Super Royal and Imperial bound in a great and of superior Books made to order, printed headings give satisfaction per, accuracy of ruling and durability of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

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We are prepared to Print and Bind books in any style sired, at rates as low quality of work cut in this where. Our executing these the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Dray receipts, Cards, Circulars, or any other description of printing, will that we do such jobs despatch. Orders re-

Stereotype, of any description that may be done as the same can be executed or else facilities for branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Dray receipts, Cards, Circulars, or any other description of printing, will that we do such jobs despatch. Orders re-

Publishers,

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, Clarke's Compendium, Rolin's Ancient History, Plutarch's Lives, Josephus, Spectator, Chain of Sacred Wonders, Familiar Science, Webb's Monitor, Soden's German, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

43 MAIN STREET CIN.

HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by
CHARLES W. COPELAND, Gen. Agent,
No. 66 Broadway, N. Y.

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use, and acknowledged by all who have used them to be perfect—simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations Distilleries, Breweries, Furnaces, Wines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions. Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855—13

ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS, In general or detail of all kinds of Steam Vessels, Engines, Boilers, Mill Work, &c. Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS, And Railway Machinery of every Description, While under construction. AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for ASHCROFT'S STEAM GAUGE, ALLEN AND NOYE METALLIC SELF ADJUSTING CONICAL PACKING, DUDGON'S HYDRAULIC JACK, &c. Also, for Water Gauges, Indicators, Steam Whistle. CHAS. W. COPELAND, Consulting Engineer, 64 Broadway, N. Y.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned THEODORE DEHON, 1013 10 Wal ar Broadway, New York

GENERAL RAILWAY SUPPLY AGENCY. SNOOK & HILL'S PATENT LOCOMOTIVE LAMPS.

83 Liberty Street, Cor. of Broadway,
NEW YORK.

JOHN W. KELLY
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

RAILROAD ENGINES & CARS,

ALSO AGENT FOR THE SALE OF

**HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,
JUDSON'S GOVERNOR VALVE.**

Orders solicited and promptly filled.

PROSSER'S PATENT
ORIGINAL LAP-WELDED
IRON AND STEEL BOILER TUBES,
SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.
SOLE IMPORTERS.

PROSSER'S PATENT SURFACE CONDENSER for high pressure steam, with sea or other bad boiler water, gauges, 3 cutter drills, counter-sinks, tube and cutting bars, expanders, tube scalers, steel wire and whalebone brushes, pull lever wrenches, tubes—plain or enameled, screwed together for Artesian Wells, HOLLOW SLABS for various purposes, Steel for Boilers.
THOS. PROSSER & SON,
27 Jan. 28 Platt Street, New York.

SOUTHERN PACIFIC RAILROAD.

MARSHALL, Harrison Co., Texas,
March 25, 1859.

To the Stockholders of the Company:

I receive, by every mail, a large number of letters, from stockholders residing in various sections of the Union, making particular inquiries as to the condition of things in Texas, and the progress of the contest now going on in vindication of our common rights. It is utterly impossible to answer these letters. I could not do it, if I were to do nothing else.

I have, therefore, to say to the Stockholders that, in order to obviate the necessity of writing to each individual, I have determined to publish from time to time, weekly, semi-monthly, or monthly, or oftener if occasion requires, a concise statement of the transactions in Texas; and the progress of the contest. These Reports will be published in the Texas Republican, Marshall, Texas. R. W. Loughery, Proprietor. The Texas Republican, throughout the existing controversy, has defended the interests of the Old Stockholders. Our Stockholders who may desire to see these Reports, or to get correct information from Texas, should at once subscribe for this paper. The subscription price is \$2 50, which the publisher authorizes me to say can be sent on, by mail, at his risk.

JEPHTHA FOWLKES,

President of the Southern Pacific R. R. Co

1,200 Kege No. 1 Railroad Spikes, 5½ by 9-16th,
Corby, Gossin & Co.'s make for sale very
low by
TRABER & AUBERY,
7 Public Landing

A Book for Every Business Man!

JUST PUBLISHED
—THE—
POST-OFFICE GUIDE!
For Post-Masters and Business Men.

CONTAINING
A Complete List of Post-Offices in the United States and Territories, arranged by States and Counties; A Complete List of all Distributing Post-Offices; Rates of Foreign and Domestic Letter Postage; Rates of Printed Matter, Transient and Regular; Abstract of the Laws and Regulations of the Post-Office Department, &c., &c.

COMPILED BY E. PENROSE JONES,

Late Assistant Post-Master at Cincinnati.

Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.

U. S. BLANK AGENCY, CINCINNATI POST-OFFICE,
January, 1859.

This work has been carefully compiled and corrected by E. PENROSE JONES, Esq., late Assistant Post-Master of the Cincinnati P. O., from the Records in this Department, and other sources, and contains the most complete list of Post-Offices especially of the Western, North-Western, and South-Western States, yet published.

MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an active pamphlet of about 100 pages. The entire matter is kept standing in type, and as the compiler is promptly advised of all New Offices, Changes and Regulations of the Department, the information is corrected up to the last day of publication, an advantage possessed by no other work of the kind.

OBSERVE, That this list is arranged by States and Counties, making it especially valuable to business men. No similar arrangement has been published since 1856. There are 3000 more offices in this than in any book heretofore issued. The Price is one-half that of any work of the kind now published.

If Single copies sent by mail (postage prepaid) to any address, upon receiving Twenty-five Cents in Silver or Postage Stamps. Five Copies sent for \$1.00, or Twelve Copies for \$2.00.

Address, C. S. WILLIAMS,
194 Walnut Street,
Cincinnati, Ohio.
Mar 10. ff.

**MOSELEY'S
TUBULAR WROUGHT IRON**



ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs, are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeted always Iron.

The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges.

We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$23 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

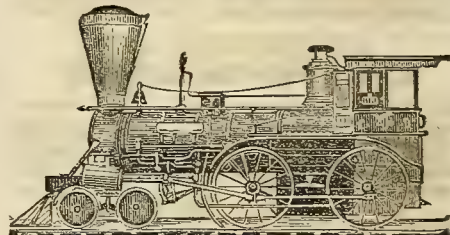
Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contract.

Office, No. 66 West Third street, Cincinnati O.
may 13. MOSELEY & CO.

**CINCINNATI
LOCOMOTIVE WORKS.**



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap 20 MOORE & RICHARDSON.

**THE KENTUCKY
MILITARY INSTITUTE,**

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, but more extended in Mathematics, Mechanics, Machines, Construction, Agricultural Chemistry and Mining Geology; also in English Literature, Historical Readings, and Modern Languages, accompanied by daily and regulated exercise.

Schools of Architecture, Engineering, Commerce, Medicine, and Law, admit of selecting studies to suit time means, and object of Professional preparation, both before and after graduating.

The twelfth annual term is now open. Charges, \$102 per half-yearly session, payable in advance.

Address the Superintendent, at "Military Institute, Franklin Springs, Ky.," or the undersigned.

P. DUDLEY,
President of the Board

Jan. 5 ff.

The Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

Thursday Morning, May 12, 1859.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.

One square, single insertion,.....	\$1 00
" " per month,.....	3 00
" " six months,.....	12 00
" " per annum,.....	20 00
" column, single insertion,.....	5 00
" " per month,.....	10 00
" " six months,.....	40 00
" " per annum,.....	60 00
" page, single insertion,.....	15 00
" " per month,.....	25 00
" " six months,.....	110 00
" " per annum,.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

The following items we clip from the *New York Tribune* of the 27th:

The State of Kentucky gives notice that the State will deposit in the Bank of America, in this city, \$150,000 to redeem, on the 1st of January next, the Bonds of the State issued to the Lexington and Ohio Railroad, on which the power of redemption was reserved. After the day named, the interest on the bonds will cease. Notice is also given that \$70,000 of bonds issued October 7, 1846, and June 15, 1848, with which a similar privilege was reserved, will be redeemed at the same Bank at the end of fifteen years from the date of cash bonds.

IS THERE SILVER AT ARIZONA?—W. T. Coleman & Co., have received by the Overland Mail, a specimen of silver from the Heintzelman Mine; at Arizona, now being worked by the Sonora Exploring and Mining Company, which we have had the pleasure of examining. It is a bar of sixteen inches in length by five in breadth, and two and a half inches thick, and weighs 889.38 ounces. The metal is pure, being 987 fine, and the value of the specimen is \$1,134 84, mint value. Shipments of the ore from the mines are now being constantly made to San Francisco, where it is chiefly employed in the China trade. This is the second specimen brought to this city from this locality.—*New York Journal of Commerce*.

OUR RAILROADS.

THE CULTIVATION OF WAY AND HOME TRAFFIC.

Our railroads are gradually getting into a better condition, by the diminution of current or floating debt; the complete organization of labor, and the economy of materials. In all these departments there is great room for improvement. But there is more yet to be done. One of the most important is for Railroad Managers to understand perfectly the nature of their business. For the last six or seven years, since railroad construction began to assume large proportions in the public eye, every set of managers has in the beginning of their prospectus announced to the public, that their road was a "Great THROUGH ROUTE." They seemed to think, that neither capitalists nor the public would have any confidence in them, unless they were a great *through route*. It was not enough that the road would have, in its own right, a populous country, a rich soil, and commercial towns, but the great prize presented was, that it was to carry the people of Europe or of China over its line. This system has been carried so far, that there are twenty roads in the west, who flame before the public, as the great *through route* from Timbuctoo to Pikes Peak! But, farther than this, the four great lines leading from the Atlantic to the West are so determined, that each one will be the great *THROUGH ROUTE*, that they have entered upon a race which is fast putting the whole concern *through*, at a quick rate. Undoubtedly the public are no losers by this proceeding, and need not complain. Nor would it be so disastrous to the Stockholders, if it were a necessary competition for the business of each road proper; but, it is not. It is a competition for *through business* only. Upon this, we need say nothing, except that the *principle* on which it proceeds is enormous. The *through business* is rarely, hardly ever, of so much importance, as the *way business*, or home traffic. There is a short line of road in the central part of Pennsylvania, which, one of the proprietors informed us, had uniformly paid good dividends, and never had any *through business*, in the common sense of the term, at all. That is, it was an interior road, with local traffic.

We readily grant, that what the *through business* may bring to a road over the local traffic, may be necessary to make profit enough for handsome dividends. All we say, is that it is not *relatively* of so much importance as the *home business*; and hence, if extraordinary efforts are made to retain business, it should mainly be made to *increase home business*. In other words, we maintain that a road should be made chiefly for its local trade, and that trade should be *cherished and cultivated*.

As an example of the contrary, take the *Illinois Central*, which has 720 miles of road, looking to Chicago, Galena, and Cairo for bu-

siness; but, getting comparatively little from the intermediate country. The result is, that the road, worth *twenty millions*, as a pure gift from the government, is likely to lose the whole, if not swamp the road entirely in *paying interest*, for which the local traffic is unable to furnish the means. Gradually its vitals are eaten out, till the skeleton only will be left.

In order to illustrate this subject, we will take two or three roads, whose reports we happen to have by us. The year is not material, as the principle exhibited will be the same. Let us take the *Little Miami Railroad* for example, and we could not select a stronger example in favor of the *through route* principle, than this road. It is on the main line between Cincinnati and New York, and does more *through business* than any other road, proportionably. In the year 1856, which is the year reported before us, this road had the *through traffic* for almost the whole Ohio Valley with New York. The number of passengers carried that year was as follows:

Through.....	111,069
Way.....	194,185
Through.....	36 per cent.
Way.....	64 per cent.

This was the result with the way traffic on a road, which had the greatest *through traffic* of any in the country. The way passengers were to, and from the following places:

Cincinnati to Way points.....	63,016
Linwood.....	6 miles... 586
Plainville.....	9 " ... 3,315
Milford.....	14 " ... 12,654
Miamiville.....	17 " ... 2,240
Branchhill.....	20 " ... 952
Loveland.....	23 " ... 26,951
Forbus.....	27 " ... 2,661
Deerfield.....	32 " ... 9,957
Morrow.....	36 " ... 18,335
Fort Ancient.....	42 " ... 1,189
Freepot.....	44 " ... 1,317
Waynesville.....	50 " ... 5,026
Spring Valley and Clegsville.....	57 " ... 4,667
Xenia.....	64 " ... 16,173
Yellow Springs.....	..... 8,695
Springfield.....	..... 13,988

We give this table only as an illustration of the manner in which way stations make up passengers. This is the strongest case which can be presented in favor of the *through traffic* theory.

In the year 1857, the joint report of this road and the *Columbus and Xenia Railroad*, from Cincinnati to Columbus—120 miles—produced this result:

Through Passengers.....	116,252
Way.....	236,135
Through.....	32 per cent.
Way.....	68 " "

The freight reported was about equal; Cincinnati being a great exporting port on one hand, and on the other receiving its supplies largely from the country immediately adjacent.

Now, let us turn to the Pennsylvania Railroad; certainly one of the great *through roads* of the country, and as we find, in the Report made February 1, 1858, the following result, viz:

Through Passengers.....	37,669
Local Passengers.....	846,356
Through.....	4 per cent.
Way.....	96 " "

The through passengers, of course, pay much more *per capita*; but, let us look at that.

Receipts of Local Passengers.....	\$966,607
Through or foreign stations.....	415,530

Thus, we see, that even the receipts are only about thirty per cent. for *through* passengers.

The receipts from freight were as follows:

Local or Way.....	\$1,241,897
Through.....	1,954,214

Here the *through* receipts are the greatest, arising from the immense supply of goods furnished the West by Philadelphia. Taking the whole business of the Pennsylvania Road, the *way* and *through* receipts are about equal—although the number of persons transported from way stations is twenty fold.

Let us now take another road of a different description, but doing a very large *through* business, viz., the *Central Ohio*:

Local Passengers.....	94,116
Through.....	12,324
Local Passengers.....	\$9 per cent.
Through Passengers.....	11 " "
Receipts from Local Freight.....	\$206,797
Through Freight.....	183,617
Local.....	53 per cent.
Through.....	47 " "

Let us now aggregate the result of these three roads, and we have these figures, viz.:

Number of Local Passengers.....	1,176,607
Number of through Passengers.....	166,244
Local Passengers.....	87 per cent.
Through Passengers.....	13 " "
Receipts from Local.....	\$1,385,204
Through.....	1,699,167
Receipts from Pennsylvania and Central Ohio for Local Freight.....	\$1,448,624
No. do. for Through Freight.....	2,137,336

We see thus, that both the passengers, and the receipts from passengers, from the Way stations is much the greatest; while, on the other hand, the receipts for *freight* are the heaviest on the *through* traffic. But, one most important element is left out. On these very roads the *cost* of doing the *way* business is scarcely one-half the cost of the *through* business. For the distance of transportation is not one half. Deducting *cost*, then, we venture to say, that on these three roads, taken together, out of six dollars, four (or two-thirds) are made from the local business. If this be so with three roads like these, we undertake to say, that in the aggregate of railroads in the United States, three-fourths of all the *real profits* are made from the local traffic. If such be the case, this traffic should be cherished and cultivated.

We shall recur to this subject again, and endeavor to work out the problem to its ultimate results.

It is currently reported that the Supreme Court of Wisconsin have agreed upon a decision, declaring the Farm Mortgages and City and County Bonds issued to Railroads in that State to be unconstitutional. We trust Wisconsin is not about to join the ranks of the repudiating States. This decision will not, of course, be final, as the non-resident bondholders will institute proceedings in some higher court to test the validity of their securities.

AMERICAN AGRICULTURE.

STATISTICAL VIEW.

The February number of the Journal of the American Geographical and Statistical Society—to which we have already referred—has a most able and interesting article from the pen of JOHN JAY, Esq., on American agriculturist. We shall refer to such parts of it as are most important. Agriculture is, in all extensive countries, the largest interest of a nation, and in the United States this is strikingly the case. The subject is of vast importance to us; because, in each year, the *relative* deficiency of crops in Europe is increasing, and in spite of all efforts to the contrary, the United States *must* furnish a great portion of that deficiency.

The official report of the products of the recent Universal Exposition of France, in dwelling upon the agricultural ability of the Empire to support its population—referring to the fact that France has raised in good years 97,000,000 hectolitres of wheat, which represents the sustenance of 32,000,000 of individuals, added, "and there are unfortunately more than 4,000,000 of our compatriots who are not in the habit of eating bread." Indeed it has been broached as an interesting question how far the physical deterioration of the standard of growth in parts of the French Empire is the result of an inadequate supply of nutritious food? Some plausibility is given to this suggestion, by the statement that the number of conscripts who are rejected on account of deficient health, strength, and stature, is constantly on the increase. Forty per cent. are said to be turned back for that cause, and although since 1789, the standard has been three times reduced, as large a proportion of the conscripts is below the required height (five feet two inches,) as before the changes, showing, as the late Professor Johnston remarks, how closely the discussion of agriculture is connected with that of the most profound social evils. The importance and dignity of the entire subject become yet more striking in view of the great truth so forcibly alluded to by Lord Stanley in his Address on Public Health, "That what ever exception may be found in individual instances, when you come to deal with man in the mass, physical and social decay necessarily go together."

These facts are most extraordinary; but, we believe, they point to a fixed *principle*, above stated, that physical and social decay necessarily go together.

This surplus of population and deficiency of food in Europe, is of such recent origin, and as yet so slightly felt, that, as a nation, we have hardly begun to realize that it is to be of permanent continuance. But European Economists recognize and appreciate the fact, that an inevitable and increasing demand for food, with an insufficient and diminishing home

supply, will give henceforth to the bread question an immense political as well as moneyed significance; and the sufficiency of each successive crop at home and abroad, to satisfy the wants of the people, within the limits of their capacity to purchase, is become a question of constantly recurring and earnest speculation.

Although Northern Europe (and Eastern) does not present so much deficiency as France and England, yet, the general cause is working there to produce the same result.

Throughout Prussia, Austria, Belgium, Holland, Bavaria and most of the minor German States, the increase of population is attended not with an increase, but rather with a decrease of the breadth of land devoted to cereal produce. In France, that decrease has been made greater by the absorption of land in the cultivation of the Silesian sugar-beet, and a similar decrease is found in Western Europe, with the exception of Belgium and Holland, which are grazing rather than agricultural countries, and are themselves purchasers of foreign grain. And excepting also Russia, which is making extraordinary efforts, involving no slight revolutions, social and political, to maintain its markets, and to secure its agricultural supremacy. That mighty empire, with a population of sixty-five millions of souls, and embracing in Europe, Asia, and America, one sixteenth of the world, presents many prominent points of similarity as well as contrast to the United States, which, without anticipating the rivalry that may hereafter arise between the two countries, invest with a peculiar interest for our own countrymen, the newly developed features of its imperial policy, and especially those which relate to the social elevation of its laborers and the improvement of its modes of culture.

In reference to the general results of Agriculture in this country, Mr. Jay says:

"Looking at the employment of the free male population of the United States over fifteen years of age, (numbering, in 1850, 5,371,876,) we find that the population engaged in agricultural pursuits was 2,400,583 or 44.69 per cent.; while the total number engaged in commerce, trade, manufactures, mechanics, arts and mining, was only 1,596,265, or 29.72 per cent.

"These proportions differ materially from those of Great Britain, where the census in 1851, returned the persons engaged in commerce, trade, mining, and manufactures, at 3,748,074 or 38.19 per cent. of the whole population, 20 years of age and upwards, and those engaged in agriculture at only 1,576,081 or 16.1 per cent.

"Looking beyond the number of individuals employed in American Agriculture, to the amount of capital invested in it, you will find it represented in 1850 at five billions of dollars, and that represented by all other branches of industry at less than one billion, giving to agriculture more than five-sixths of the

whole; and although these figures may be but an approximation to the truth, the proportions are probably correct.

"Agriculture, by its products, adds to the wealth of the country some sixteen hundred millions per annum, and in the State of New York, where the assessed value of real estate is \$1,107,272,715, notwithstanding the enormous wealth of the metropolis, the agricultural interest pays *four-fifths* of the taxes.

"Prof. J. F. W. Johnston, in his lectures on agricultural chemistry, says, that *nine-tenths* of the fixed capital of all civilized nations is embarked in agriculture."

These are general views; but we propose hereafter to give more detailed and systematic views of what this country has done.

The Department of Statistics is now becoming recognized, as an all important, which is hereafter to be the chief aid of Statesmen and Philosophers.

LETTER FROM W. WRIGHTSON.

SANTA RITA, ARIZ., April 16, 1859.

T. WRIGHTSON, Esq.:

Dear Sir:—In my letter of March 24, I gave you the details of some of the operations of the Company up to that date. We were at that time in need of more peon labor than we had, and it is only within the last week that I have been able to procure hands. We now have enough to push forward.

In the interval since my last letter, we have sunk the main shaft of the Salero to the depth of thirty feet. At the identical spot where we now are, the vein pinches and we therefore get very little metal. What we do get has also been exposed to the action of the atmosphere for years, and is not very good. As we get farther down the rock hardens, but we have the consolation of knowing, also, that we are getting below the action of the air and the metal will improve. We have also determined to run a fronton into the mountain on the level of the old work—we have there very good ore. We have not been anxious to push this much earlier, as we were compelled to sink our working shaft and could not do both. We shall have to put up a patio for this ore. The surface improvements around this mine are also progressing rapidly. We have now almost completed an excellent house for the Major Domo—immediately at the base of the mountain, and have made some adobes to put up peon houses. We shall continue making them as long as the water lasts. The house of the Major Domo and the peon houses will form half of a good corral where we can keep some of our animals. The water here lasts longer than we thought at first it would. We supposed when we first began to build, that it would have given out before now, but we now think it will be permanent. As before reported we have now a good wagon road to the mouth of the mine.

At the Bustillo mine we have been compelled to suspend operations for the purpose of using the peons on other mines. In my last I reported the prospecting of a new field three quarters of a mile or so north-west of the Bustillo Mine. There are here three distinct veins which give fair promise. In the upper one we have cleaned out an old opening, and sunk down a little in the vein to the depth of some twelve feet or thereabouts. Of course this is too near the surface to expect very good ore, but we find cubes of crystallized galena intermingled with the green and blue salts of copper, and a small sprinkling of the sulphuret of silver. These are all good indications, and we think these veins will prove very good. They are like most of the mines in these mountains—hard to work. The Mexicans named this La Mina Incarnacion, because we opened it on Incarnation day—one of their great feast days.

In the Crystal Mine, which is near the Bustillo, and higher up the arroyo, we have put a gang at work. They are now over twenty feet down, and have a vein eighteen to twenty inches wide, and solid metal. It shines most beautifully. It consists of finely crystallized ores of lead, zinc, and iron, with a small proportion of silver. The

assay considerably nearer the surface than we now are, showed some sixty dollars of silver to the ton of ore. If the yield is small, it is amply compensated by the abundance of metal, and it grows larger as we go down. Our Mexican minero says it is the best mine we have. At the depth of two or three yards more we shall start a fronton. Finding that we could get out an abundance of metal here, I concluded to put up a furnace at once, and have got one thousand adobes now made, and drying in the sun. These will put up both furnace and vasa. We commence work on Monday on the furnace. I have hired a Mexican who is said to be the best smelter in this country. He takes charge of the erection of the furnace and vasa, and is to work it. I deemed it better to begin operations in this way than to run any risks by trying new methods. As we gain experience in this, we will try to make improvements—not before. We shall have another advantage by smelting the ores of the Crystal Mine. In addition to the silver they furnish, they give us an abundance of litharge to smelt our own more difficult ores, and to sell to the Sonora Company.

Ten days ago I took a gang of hands three miles over the mountains, and began work on a new vein. We were led to believe it worth our attention from the fact that we found there the old shaft of the former miners, their old forge in ruins, and a stone foundation for a house. We cleaned out the old work, erected a couple of huts, and posted up a notice of our occupancy of the mine. We have now four months to sink a shaft thirty feet. The old work is about ten feet deep. While this gang of hands was engaged here, I went in company with Mr. Way to take possession of and secure another mine nearly five miles distant from our house. It is in a great canon which runs from the principal peaks of the Santa Rita down to the Santa Cruz. The vein on which the opening had been made, is on the north-west of the canon, about half way up the mountain. On the other side of the canon is a small plain, not fifty yards in diameter, where we found the old Arastres for crushing the metal. The vein stands up boldly, like an old rampart on the mountain slope, and is very prominent for about a quarter of a mile. Its quartz cap is deeply tinged with iron, and gives unmistakable evidence of the heat to which it has once been subjected. We found that the vein had been opened in two different places, one on the crest of the hill, and one in an arroya running down the side of the mountain. The first opening was all grown up with briars and the other furnished a nook for a magnificent wild grape vine. The first had the appearance of being filled designedly, while the other seems to have been filled with the washings of the mountain slope. In the canon below the mine is a fine stream of water, which is said to be perennial. The mountain slopes afford abundance of cedar, oak and pine. I picked up pieces of charcoal near the arastres, and the assay of a small piece of ore taken from the arastre some time ago was fourteen thousand dollars per ton. It was a piece of Chloride of Silver, and is an evidence of a good vein. It is said that this ore is never very abundant, but gives place to the sulphuret of silver lower in the vein. We do not expect to obtain from any vein very great quantities of such metal as this, but a little of it mixed with poorer ore raises the average of the whole to several hundred dollars per ton, and that is good enough. We staked out our mules, and went to work with our pick and shovel, and soon had the old holes cleared of bushes and vines, and fresh dirt thrown out. As the sun was nearing the western hills, we descended to the little plain across the stream, and Way took his rifle to hunt for a deer, while I set to work to put up the frame of a hut. By dark I had my hut framed, and Way came back without buck, so we sat down by the stream and made our evening meal of bread and panache. In the morning, we went again to the mine and threw out a little more of the old dirt, and posted up notice that we had taken possession and intended to work the mine. This being Saturday we returned home. The following Monday I sent Mr. Grosvenor, Mr. Morehouse and three peons with more tools, rations and an old tent to cover their grass house. They have been hard at work, and are now thirteen feet down in the old shaft. The dirt here was soft and easily worked, and the men worked late and early. Next week they will clean out the other shaft, and probably get out ore enough for an assay, of which I will duly inform you. This mine is said to be known as the Mina Obispo, or Bishop's Mine. The fact of there being an Arastre there convinces me that it was considered by its former workers a mine of great importance. Its situation, contiguous to wood and water, are great advantages for any

mine, and in the future, if the adjacent veins are found profitable, there will be here an ample field for the operations of a separate company.

In the Ojero we have done very little, except to clean out a little fresh dirt, and post up a notice of our occupancy of it.

At Tomacacori, we have got a good deal of fencing done, and are otherwise pushing forward the work. We are doing our best to raise a good crop, and have no doubt we shall succeed.

In the conclusion of this letter, permit me to state, that I am much encouraged at the prospect of a result from the labors we have expended on our enterprise, and trust that our expectations will be fully realized.

I am, truly yours,

W. WRIGHTSON.

UNITED STATES POST-OFFICE.—The revenue and expenditures of the United States Post-Office for six years, under the five cent and three cent rates, have been as follows:

FIVE CENTS.

Year.	Revenue.	Expenditure.
1846.....	\$3,487,190	\$4,084,897
1847.....	3,053,893	3,979,570
1848.....	4,371,977	4,266,850
1849.....	4,905,176	4,479,049
1850.....	5,552,971	5,229,933
1851.....	6,727,667	6,278,402

THREE CENTS.

Year.	Revenue.	Expenditure.
1852.....	\$6,925,971	\$7,108,459
1853.....	5,940,725	7,992,957
1854.....	6,935,586	8,577,424
1855.....	7,342,156	9,963,342
1856.....	7,620,822	10,405,266
1857.....	8,053,952	11,508,053

OHIO DISTILLERIES AND DRINKING HOUSES.—

The Ohio Statistical Bureau gives, for the first time, the approximate statistics of distillation and drinking for 1858. The commissioner has, however, confined himself to the *original* liquor, and not the modifications of it, which pass under various names. He says:

"In Cincinnati and other large towns, there are many stores which retail liquor *incidentally*, but are not properly within the limits of this table. The following are the general aggregates of the table:

Reports from Counties.....	87
Counties with no distilleries.....	31
Counties with distilleries.....	56
Number of distilleries in 56 counties.....	160
Corn distilled.....bushels	11,714,985
Whisky made.....gallons	39,029,594
Whisky in barrels.....barrels	780,591

We are informed that a very large amount of whisky, in some form, is used in the arts and manufactures; but it is not, at the present time, exactly ascertainable."

MASSACHUSETTS RAILROAD DIVIDENDS.—The following table exhibits the capital and cost, (January 1, 1859,) of fourteen Massachusetts railroads, with the rate of dividends paid since 1853:—

	Cost.	Dividends 1858, per cent.	Average last five years, per cent.
Boston and Providence.....	\$3,524,987	6	4.8
Boston and Worcester.....	4,649,098	6	6.6
Boston and Lowell.....	2,422,598	6	4.8
Taunton Branch.....	313,116	8	8
Nashua and Lowell.....	654,603	8	7.4
N. Bedford and Taunton.....	544,165	6	8.2
Western*.....	10,881,281	8	7.5
Eastern.....	4,597,741	0	1.4
Boston and Maine.....	4,219,336	6	6.6
Fitchburg.....	3,540,000	6	3.6
Old Colly & Fall River†.....	3,434,164	6	5.4
Connecticut River.....	1,801,943	2	3.5
Providence & Worcester.....	1,789,476	7	6.4
Worcester and Nashua.....	1,322,897	4	3.3

* Including Albany and West Stockbridge, and Hudson and Boston Railroads.

† The Old Colony Railroad (opened in 1845,) and the Fall River Railroad (opened in 1837,) were united in one corporation in 1854.

OPERATION OF THE MASSACHUSETTS RAILROADS.

The tabular statement below, presenting in brief the operations of the Massachusetts railroads from 1842 to 1858, inclusive, will be found interesting. With three exceptions, the "net income per mile run" for 1858 is the smallest for seventeen years. The mileage is larger than ever before; "merchandise hauled one mile," the largest with one exception for the full term, while the number of persons carried in the cars is smaller than for any of the preceding eight years, showing a falling off of about three millions of passengers from the preceding twelve months. The falling off is principally in the short travel, probably the larger proportion of it was what is called the "commutation" traffic. The net income per cent. on cost for the past year is over six per cent., a result which, it must be regarded, is really favorable, compared with the general results of the business of the country in a season of such universal prostration. Compared with 1857, the "expenses per mile run" show a decrease of 22 cents per mile, showing an aggregate saving on the entire mileage of \$1,200,000; the receipts per mile run, however, show a falling off of 35 cents per mile, or an aggregate of nearly \$2,000,000. Under ordinary circumstances, the gross receipts of the whole system would have been some \$10,500,000, but the past fifteen months of business prostration has prevented that regular increase of traffic which has been the rule from the year 1842 until now, with one exception. The stockholders will be gratified to know that the property is in so good a position, and that the prospects for the future are promising and hopeful. In the following table the "number of miles in operation," and the "cost" refer to the commencement of each year, while the other items comprehend the full fiscal or legal year:

OPERATIONS OF THE RAILROADS OF MASSACHUSETTS FROM 1842 TO 1858, INCLUSIVE—COMPILED FROM THE ANNUAL REPORTS TO THE LEGISLATURE.

Years.	No. of railroads in operation.	No. of miles in operation.	Cost.
1842	10	431	\$19,241,858
1843	12	461	19,974,593
1844	12	461	20,396,055
1845	12	463	21,572,820
1846	16	622	27,034,927
1847	15	715	32,796,393
1848	21	767	41,392,632
1849	27	945	45,125,768
1850	32	1,492	59,939,432
1851	36	1,142	52,595,888
1852	36	1,150	53,076,013
1853	38	1,164	54,914,506
1854	37	1,194	57,095,498
1855	37	1,281	60,339,391
1856	42	1,325	62,261,670
1857	43	1,351	62,794,422
1858	41	1,380	62,178,435

Years.	From passengers.	From freight.	From mails, etc.	Total.
1842	\$1,216,866	\$669,682	\$84,239	\$1,971,787
1843	1,226,231	783,416	81,137	2,128,234
1844	1,498,026	963,563	80,343	2,559,969
1845	1,612,625	1,163,010	100,323	2,895,219
1846	2,018,163	1,467,969	119,217	3,642,171
1847	2,569,784	2,205,840	196,721	4,964,532
1848	2,849,722	2,335,477	290,725	5,405,845
1849	3,032,701	2,411,307	252,991	5,741,799
1850	3,404,948	2,008,766	296,537	6,419,533
1851	3,525,188	2,650,465	280,248	6,599,576
1852	3,611,790	2,819,409	273,801	6,895,517
1853	4,171,964	3,330,369	317,627	7,977,527
1854	4,495,836	3,725,186	346,441	8,696,251
1855	4,600,877	3,994,075	451,504	9,077,529
1856	4,804,288	4,372,913	452,757	9,749,918
1857	4,424,347	3,833,807	478,529	9,094,008
1858	3,944,803	3,794,295	502,979	8,5, 6, 703

SOUTHERN PACIFIC RAILROAD.

NEW ORLEANS, April 29, 1859.

To the Stockholders of the South Pacific Railroad Company:

It gives me pleasure to appear before you at this time. Since I have held any general official communication with you, important events have transpired in the affairs of our company. The litigation growing out of our troubles has, to a great extent, ceased. The suit at the instance of the State of Texas vs. the Company, was tried on general and special demurrers at the last term of the District Court of Harrison County, Texas. The case has been correctly reported by W. P. Hill, one of the attorneys for the New Company, and by R. V. Richardson and J. McKay, two of the attorneys of the Old Company, in that suit. The able, lucid and learned opinion of Judge C. A. Frazer is worthy of his intellect and your perusal; and for your benefit I will have the same printed in convenient form for distribution. The great point in the case decided is, that the State of Texas had not authorized the proceeding to be instituted against the Company. It is necessary, when a Company shall forfeit its charter, and a suit is to be instituted on the part of the State, for the purpose of judicially determining the fact of forfeiture, that the State shall, by some positive enactment, have directed such a proceeding to be had; for the State may choose to waive the forfeiture, and may never claim it. It is a question purely between the State and the Company; and if the former does not elect to pursue her right by an appropriate remedy, no person has the right to complain. There was no law in the State which manifested her will that the forfeiture, if one existed, should be claimed. It was held that the Governor, or the Attorney General, could not by virtue of their office, at their own choice and will, institute and maintain this suit.

It was held by the Court that neither a failure to report in 1855 or 1856, the alleged insolvency, or the holding of meetings of stockholders and directors out of the Territorial limits of Texas, or the sale under the Dead of Trust, (the principal grounds relied upon,) were sufficient to authorize a forfeiture of the charter; but if these or any other causes were sufficient, that the Legislature, by the passage of the act of 26th of August, 1856, and the act of 19th December, 1857, waived all such grounds, and thereby was now estopped from setting them up.

The argument, to my mind, is conclusive; and I may add, that it seems to be the general opinion of all persons, both learned judges and eminent lawyers, in the State of Texas. The State gave notice of her intention to take an appeal in the case, but had not done so up to my departure from Texas; and it is generally believed there that such will not be done.

The Attorney-General and the Governor have been written to by prominent citizens of Texas, and a public meeting of the people of Harrison County has been held, which was largely attended, and conducted most harmoniously, passing resolutions approving the disposition of this suit by the court, and asking these high functionaries of the State not to take an appeal, and to give directions for the dismissal of the suit. I believe both will be done within a month from this time.

Neither the late Attorney General, nor his Excellency, Governor Kunkel, are to be censured for the institution of this suit. They instituted it, doubtless, from public and patriotic considerations. They found two parties wrangling and litigating over the prostrate form of this colossal enterprise, instead of building the road from the munificent endowment granted by the State. A great public work was suspended and probably ruined, because the friends and managers had fallen out by the way side. Nothing is more natural than that these officers should feel aroused at this quarrel, and seek to restore to the State her valuable franchises and rights of property, which she had granted. But now that investigation before a learned tribunal has settled the rights and duties of both the State and the corporation; and the contending companies have settled their disputes upon a just and equitable basis, and both now are satisfied and harmonious; and the public, in and out of Texas, has, and is giving its approval, the Governor and Attorney General will not be the only remaining stumbling block in the path of this work, so incalculably beneficial to the State of Texas, the United States, and the world. But if an appeal should be taken, we have no fears of the result, before the enlightened and final judicial tribunal of that great State. And if, in any possible contingency, the decision in the Supreme Court should be different from that of the District Court, the case having been appealed, on demurrer, it could only be sent back to the District Court for a trial upon its merits. This would involve at least a delay until the Legislature of the State would meet, when, it is the universal opinion, that her enlightened and liberal body of statesmen, looking to the true interest, public policy, and glory of the State, would grant us any relief we might ask, that was reasonable, just and proper. Looking to all of these considerations, we give it as our unqualified opinion, that we have nothing to fear from the State suit; nor should it weigh a straw in the way of the most vigorous action of our stockholders. It is the interest of Texas to have the road, and ours to construct it.

THE SETTLEMENT BY COMPROMISE.

After the State suit was tried, avertures for a settlement of the deed of trust suit were made, and in one day's time a basis of settlement was agreed upon, which was liberal and just to all, and at one blow struck down the great lion that stood in the way of the progress of the work. The terms were agreed upon fully and completely; nothing is left to third persons or to uncertainties; but each provision is so explicit and clear that there can be no misunderstanding in the future about the rights and duties of the respective parties. The interest and duty of both are identified in its prompt and faithful execution. It was submitted to writing in duplicate, duly executed, sealed, delivered and ratified by both companies, and we are glad to say that the chief persons in the new company, especially Messrs. Scott and

Years.	Of road bed, mot., power.	Of expenses.	Net income.	Net income per cent.	By passenger trains.	By freight trains.	By other trains.	Total.	Total receipts.	Total expenses.	Net income.
1842	\$190,844	\$605,236	\$9,400	5.39	892,892	450,533	90,456	1,334,701	\$1,488,709	\$1,488,709	\$0
1843	192,580	606,819	1,012,313	5.39	896,163	460,444	92,552	1,458,759	1,458,759	1,458,759	\$0
1844	217,454	670,876	1,107,580	7.12	979,598	540,065	66,940	1,535,603	1,535,603	1,535,603	\$0
1845	247,033	760,873	1,281,092	7.48	1,010,510	610,068	94,630	1,715,188	1,715,188	1,715,188	\$0
1846	313,793	1,050,604	1,486,576	7.30	1,435,757	746,547	145,708	2,328,013	2,328,013	2,328,013	\$0
1847	480,068	1,541,700	2,372,432	7.45	1,718,406	1,281,432	206,673	3,177,143	3,177,143	3,177,143	\$0
1848	481,009	1,754,419	2,741,601	6.11	2,113,406	1,543,739	261,772	3,898,917	3,898,917	3,898,917	\$0
1849	578,673	2,850,919	3,112,705	6.32	2,760,898	1,727,746	251,164	4,739,808	4,739,808	4,739,808	\$0
1850	579,340	3,306,762	3,306,762	6.39	2,607,611	1,434,749	203,007	4,245,367	4,245,367	4,245,367	\$0
1851	633,606	3,693,619	3,693,619	6.39	2,760,898	1,727,746	251,164	4,739,808	4,739,808	4,739,808	\$0
1852	751,701	4,008,441	4,008,441	6.39	2,760,898	1,727,746	251,164	4,739,808	4,739,808	4,739,808	\$0
1853	912,586	4,298,296	4,298,296	6.39	2,760,898	1,727,746	251,164	4,739,808	4,739,808	4,739,808	\$0
1854	1,008,441	4,361,013	4,361,013	6.39	2,760,898	1,727,746	251,164	4,739,808	4,739,808	4,739,808	\$0
1855	1,203,076	4,361,013	4,361,013	6.39	2,760,898	1,727,746	251,164	4,739,808	4,739,808	4,739,808	\$0
1856	1,307,102	4,361,013	4,361,013	6.39	2,760,898	1,727,746	251,164	4,739,808	4,739,808	4,739,808	\$0
1857	1,301,513	4,361,013	4,361,013	6.39	2,760,898	1,727,746	251,164	4,739,808	4,739,808	4,739,808	\$0
1858	1,296,992	4,361,013	4,361,013	6.39	2,760,898	1,727,746	251,164	4,739,808	4,739,808	4,739,808	\$0

Hall, who negotiated this settlement with us, have given us undoubted evidence of their sincerity and good faith in both the making and carrying out of this settlement, and for the prosecution of the work. We endeavored to make a settlement that was liberal and just; if by so doing we could procure one in good faith, uniting into harmonious action the energies of all parties, and the people of Texas, for the enterprise. This endeavor has been successful, and we believe that this great desideratum has been accomplished, and that we have the good will of nearly all the members of the new company, whose good opinions, friendship and co-operations are material, except a very few, who, probably counseled by their feelings of chagrin under defeat, may yet nurse the apple of discord, and give out now and then harmless mutterings, which, however, are overwhelmed in the general shout of congratulation that has met this settlement and compromise everywhere. We will trouble you with a brief glossary of the points of this settlement.

1. For the purposes of this agreement only, the contracting parties recognize each other as legally existing corporations, and for convenience designate the one "the old company," and the other "the new company."

2. The new company agree to transfer to the old company all their right, title and claim in the railroad, property, charter and franchises, for the sum of three hundred and sixty-two thousand dollars; to be apportioned among the stockholders of the new company, according to a schedule of claims thereto annexed, marked A., which gives the names, items, dates and considerations of each claim in this manner: First—All judgments outstanding against the old company to be at once paid, or otherwise satisfied, and that amount to be deducted from the gross amount, together with all the claims held or otherwise arranged by the old company. Second—the sum of fifty thousand dollars to be paid in thirty days from the final determination of the State suit. Third—Fifty thousand dollars in ninety days from the final determination; and fourth, the balance in one and two years from the final determination of the State suit.

3. The new company are to retain the possession of the road, etc., until the two sums of fifty thousand dollars each are paid, or secured to be paid, satisfactorily in the judgment of Messrs. Payne & Harrison, of this city, and when so paid or so secured, "the new company" are to relinquish and transfer to the old company all their right, title and claim to the railroad, property, charter and franchises, giving full and entire possession thereof to the old company, reserving a mortgage or deed of trust on the same, to be executed by the old company, to secure the payment of the balance then due or unpaid to the company, embraced in schedule of debts.

4. The old company are to pay the judgments, amounting to about \$23,000, against the new company, in four months from the date of settlement—which amount is to be a part payment upon the first fifty thousand dollars due; and the new company are to protect the old company against any levy, sale or annoyance, by virtue of these judgments and debts in schedule A, until the payment shall be finally realized under the compromise.

5. The suit of the old company *vs.* J. M. Saunders and others, or the new company, was to be and is dismissed.

6. Any of the debts in schedule A, either now or hereafter paid by the old company, or for which it has agreed to issue stock, shall belong to the old company; and it or such persons as it may appoint to be subrogated upon the books of the new company, to the ownership of said stock. And upon the payment of the judgments and the balance of the two fifty thousand dollar installments, the new company is to deliver to the old company its stock and office books, and seal of the office.

7. While the new company continues in possession of the road &c., the old company has the privilege of working upon and constructing the same, and using the cars, locomotives, &c., for that purpose, at the expense of the latter; but not adverse or in hostility to the former—having now possession for all practical purposes of the road.

8. Both companies bind themselves to hold each harmless of all debts, liens, or incumbrances against the railroad, property and franchises, created by themselves. The new company calls in all issues of stock for sale, or if any has been sold, it accounts for the proceeds thereof.

9. The old company has the right to sell any of the property not necessary for the operation of the road, at an agreed price, to any stockholder of the new company first, then to any other person; the proceeds to go in payment of the debts of the company embraced in schedule of debts to compromise.

10. If the old company should by any possibility be dissolved before the payment of the two thousand dollar installments, then the stockholders comply with the agreement, by paying, etc.; and the road, property, franchises, etc., claimed by the new company shall be transferred to such persons as the last Board of Directors of the old company may designate, subject to all conditions, liabilities, and entitled to all the rights of the old company, under the agreement of compromise, by virtue of this compromise.

11. The new company shall not make any further contracts, and are to maintain their present status as one of the defendants in the State suits, until it is finally disposed of, giving our company all the benefits from the organization!

12. Two companies pledge themselves to carry out in good faith the terms of this settlement; neither can be benefited by violating its spirit and meaning.

13. They agree, if necessary, to make on liberal terms any supplementary agreement that may be found necessary to carry out this agreement; to protect the right of the parties; and to construct the road.

14. All items embraced in schedule A, which have or may be paid by, or for the old company, are to be credited on the gross indebtedness stated in the settlement, and stock in the new company shall issue for the same; a considerable amount of which has been already settled and is now held by the old company, of this indebtedness.

It will be seen by the terms of this settlement that both

companies are united in interest in defeating the State suit; and prompt measures have been taken for that purpose.

It will also be seen that both are united in friendship and good faith to carry the same out; to build the road and promote the public good; and, that the organization of the new company may be continued and preserved, and may finally take the place and stand of the old company, thereby becoming the Southern Pacific Railroad Company. There are some weighty considerations for this view of the subject. There might possibly be, in the opinions of some persons, grounds of forfeiture, good against the old company, which would not be good against the new company. In that event, our stockholders who have, and do now come up to our help and rescue, would only have to march into this ark of safety, and leave their rebellious brethren in the ruin pending over the old company.

Such a rescue for the one, and loss of the other, would be only just and merited. It is hoped, however, that all, in a spirit of justice, will promptly respond, to now retrieve the company and provide means to progress with the road. It will be further seen that upon the payment, or security thereof, of one hundred thousand dollars, we get the absolute possession of all things. It is but just and right that we should pay our debts. A great company cannot expect to obtain and preserve the confidence of the public, only by a strict adherence to the great principles of justice and integrity. Upon this palladium it can stand, and construct for itself a name as imperishable as its great work.

THE NEW POLICY—REDUCTION OF STOCK.

After we had accomplished so much for the relief and solid prosperity of this company, we deemed it but right to inaugurate a new policy of administration, in conformity to the expressed views of our stockholders at the Louisville Convention in November last. In attempting to adopt a policy, it became a paramount object, in our judgment, that it should be sound, and such an one as the enlightened judgment of the business world would approve as sound and solid. We had to look to our condition, our wants, necessities, our rights, and duties; and to strike out from these elements a path that all could travel—and one that would offer inducements to our paying stockholders and the capital of the world, seeking secure and profitable investments. Upon full and mature consideration, we had the courage to do what to our judgment seemed the best for all, relying upon your judgment and capitalists generally for our support.

It appeared to us that we should reduce our capital stock one-half, thus bringing it down to a sum not exceeding \$1,250,000. Our property and our assets, after the payment of our liabilities, which did not exceed \$500,000, now reduced, since the adoption of our late policy, by the conversion of debts against the company into its stock, at par, by creditors, amounting to about \$140,000, leaving our liabilities now about \$360,000, thereby practically vindicating the wisdom of the policy lately inaugurated.

This reduction is applicable to all our outstanding, forfeited and surrendered stock. It reduces one-half both the nominal and actual stock issues of the company. In the valuation of our property, a large item is 226,000 acres of land, at the rate of sixteen sections per mile, for twenty-five miles of finished road, which is estimated by the surveyor at the value of from five to ten dollars per acre; but for our purpose now we estimate at the low price of three dollars per acre. See summary appended hereto.

These lands are already surveyed and located, and the field notes returned, and the same are in a condition to be patented upon dismissal of State suit.

The road now built is estimated to be worth \$625,000. We have other assets and property, worth about four hundred thousand dollars. Nothing here is said of the value of the charter, which is estimated by calculating and prudent minds to be worth millions of dollars.

Whatever may be the value of the property and franchises of the company, all belongs to the stockholders, and only to them. The stock represents these values, and carries them by assignment and transfer. It alone takes the dividends and profits of the company, and, as long as the proper relation is preserved between the stockholders, it can make no difference whether the aggregate quantity of stock is represented by one quantity or another—by a greater or less number of shares. If it makes no difference in the aggregate, it makes none in the integral part.

It is the same thing to A, if you say he owns the one-tenth of one hundred, or one-fifth of fifty. It, therefore follows, that the reduction of stock does neither make the holder the richer or the poorer—but it has these beneficial results: it brings the stock up to par, and makes it sought after by capitalists. If we sold it before at \$2.50 per share, now we sell it at \$5 per share, the par value thereof. It brings the stock down to the basis of the value of the property, and upon this basis our stockholders or our capitalists may safely and will readily invest. It removes the idea of fancy or bogus stock, which has extensively existed in the public mind; and it shows that we intend to be governed by sound practical views of business in the future management of the company. We have authorized the sale of stock, to produce \$1,500,000, for the purpose of paying off every dollar of our debts, and buying negroes, and constructing the work with rapidity and certainty.

Arrangements will be made to sell this stock throughout the United States until the required amount of money is raised. The privileges of the exclusive purchase for ninety days is given to our own stockholders to take all this stock. If they will not do it, then we will offer it to others, for we must have the money to free the company from debt and to progress with the work. It is expected that every stockholder, who has not already done so, will, at an early day, lend to the company fifty cents per share, upon the whole number of shares now held. Some have done this; their money has been and will be used to save the property and franchises from the shipwreck. If all expect to share in the salvage, all must contribute equally. If, however, any one will remain obstinate and disregard a common interest and a common duty, thus abandoning his own interests in the wreck, as well as that of his associates, he can not and

must not expect to share in the salvage or in the results of their contribution! It would not be just and right to permit him. And if I would protect (which I would gladly do, if I could,) those noble men who have stood by me and held up my hands and contributed their money, would not permit me to do so. Such an obstinate and perverse stockholder must look out for himself, as he has left the company and his associates to do! And it may be well enough to forewarn all such that the legal means and power are at hand to cut him off under the laws of Texas! The judgments heretofore existing against the old company have been purchased and transferred to me, for the benefit of all who have contributed their money, and this policy can be enforced by a sale. Thus a new company can be preserved, and all who have contributed money either by loan or the purchase of stock, can go into it. In either way, the refractory may be cut off; or, if he is permitted to retain his interest in the company, his stock, under the new policy, must be reduced two-thirds, instead of one-half, which surrender will enable all to help who can not render pecuniary aid to save all he has invested in the road, with vast ultimate returns. All must promptly act!

REDUCTION OF SALARIES.

We have reduced the salaries and expenses from \$80,000 down to about \$13,000. Economy in the expenditures of money must be practiced by this company, be you and the world can have confidence in it. We must have no drones or sinecures! Officers must expect to do their whole duty, for reasonable and fair compensations, subject to a rigid accountability. They are not to be masters, but servants, faithfully discharging the trusts reposed in them. All abuses must stop, of omission, or commission.

PAYMENT OF DEBTS AND CONSTRUCTION.

Our debts must be first provided for. Then we must have means to go on with the work. We should build, in the next twelve months, fifty miles of road. Our policy is to have the construction resumed immediately. We have made contingent arrangements for that purpose, which will be faithfully carried out, no doubt, on removal of State suit.

MONEY AND MEANS.

We can not build the road without money, labor, and materials. We must have money. How shall we obtain it? We esteem it the interest of the company to raise one million and a half of dollars. It is believed that now is a favorable time to succeed. The nation is prosperous—commerce flourishes—agriculture is promising. Australia and California, the El Dorado of the Northern and Southern Hemispheres, are yielding, without signs of weariness or exhaustion, their golden treasures. As it is washed from their sands, or separated from their quartz rocks, much of it must be fixed to the soil in other regions of the country, in railroads. What enterprise gives better promise than ours? Where will you find so magnificent a domain granted to a company as ours?

We get eight millions of acres of land from the State of Texas. We get a loan for ten years of six thousand dollars per mile from her treasury. We pay no bonus from our profits to the State. The endowment is unequalled. If capital will invest in other railroad schemes, which possess none of these advantages, why will it not invest with us? We believe it will, and that all which is now required is to offer the opportunity to the world, with guarantee of good management and integrity. We have, therefore, directed enough of our five per cent. to be sold to produce one million and a half of dollars to free us from debt, and to procure labor to construct the road.

As our stockholders have borne the heat and the burden of this enterprise, though comparatively light on each, we offer the stock first to them, and give them the preference of taking it for ninety days. If they do not want it, then we turn to the capital of the nation; make an exhibit of our affairs; show it our prospects, our property, and our great privileges, and ask it to rest with us! We believe it is only necessary to give the invitation and afford the opportunity.

When we have raised the desired amount, our stock will be three millions of dollars; and our property will be worth more, because we shall have not only the means to pay our present debts, now not exceeding three hundred and sixty thousand dollars, but we shall have, as the property of the company, the balance of the money thus produced, which, as stated elsewhere, is to be invested in slave labor—enough to perform the unskilled labor of the road, leaving the company to provide otherwise only for the skilled labor, iron, and rolling stock.

CONGRESSIONAL AID.

We beg to call your notice to our prospects for obtaining Congressional aid, by mail contracts, etc., or a contract to build our road to the Pacific ocean.

There is no longer any doubt in the public mind as to the practicability of constructing a railroad along the parallel of 31 deg. to the Pacific ocean. What was regarded six years ago as a chimera of the brain, has become an eminently feasible project. The nation must have a Pacific railroad; private, public, political, and national considerations demand it. The action of the last Congress demonstrated the growth and maturity of public sentiment upon this subject. While Mr. Gwin's bill, and every amendment proposed to it, recognized the necessity and practicability of such a road, not a respectable effort was made anywhere against such a connection. The only questions of dispute were as to the terminal points and character of aid to be given by the Federal Government. While our line of road to the Pacific stands out preeminently favored by nature in all the elements of so grand an enterprise, it can afford not to be contracted in its views. If there should be even three roads fostered by the Federal Government, ours must be one; if one is to be provided for, ours must be that one. Standing on sure ground in any event we can afford to be liberal in our course. We are assured on undoubted authority, that it is expected and desired that bids shall be presented to the next Congress to build a railroad to the

Pacific ocean, upon the various routes. Our company should file a bid for a road along and in extension of our road to the Pacific ocean. These bids will have much to do in settling in a very practical mode, the comparative cost of the contending routes.

We have the shortest line, the best climate, and the most productive belt of country on the continent, extending east and west. Along our line we have wool and water more abundantly than on any other projected line. We have neither the snowy storm of the North, nor the burning winds of the South. On our route nature has spread out her fertile valleys, and tables, embowed with the treasures of coal, iron, stone, and precious metals, overspread with a gorgeous carpet of grass, fringed with forests of timber. Where the Cordilleras cross our path, nature has broken them down for us to pass their otherwise impassable heights. We shall not have to perforate a single mountain with a tunnel. Our grades will be easy; and we can build one thousand miles of road on our line without doing little more than to level the track with dirt thrown out of the side ditches. We pass through the middle of the great cotton-growing belt of the world, capable of sustaining a thriving and vigorous population, wealthy in all the elements of prosperity; thus becoming the sustaining and supplying sources of our road. The way freights and travel will make it a paying road, to say nothing of the through travel and freights, and government service in the way of small contracts, the transportation of troops and munitions of war. In any shape the Government may see proper to aid in the construction of the great national railroad to the Pacific, we must be participants. If by land grants, or loans of national credits, or guarantee of interest or profits, or by contract; we can afford to build the road for less than any other association of capitalists, along any other line, can by any possibility build such a road. What would be magnificent aid to us, would utterly fail to others, along any other route! There can be no just conflict, in our judgment, between our route and any other, to the Pacific ocean. Upon our line we can commence work on the Pacific, at the Gulf of California, at Fort Yuma, and at the Eastern end at the same time, so that with reasonable Government aid, we can build the whole road in a shorter period than on any other route.

CONCLUSION.

The company, it will be seen, must have money promptly to comply with the terms of the compromise, freeing it from debt, and progressing with the work. We have but two available resources at present. The one is the loan, and the other is the sale of the reduced, forfeited and surrendered stock. Every stockholder must make the loan or a surrender, under our new policy. It is our duty to spread our wants before you; to invite you to respond to the plan adapted for the relief of our enterprise. It is your interest and duty to respond. If some stockholders will not, we, who will, must dissolve our connection with those who refuse; not by submitting to a common ruin, but by cutting off all such as a dead weight, by a simple, easy, and direct process. We have the power to do it. Those who contribute demand it; and the officers have no alternative but obedience! This policy and its rigid enforcement is not a matter of choice, but necessity. It must not be regarded as a threat, but friendly warning! While we desire the cooperation of every stockholder, and united effort will make the task to be performed lighter, still no one stockholder, or class, or set of stockholders, at one place, is indispensable to the success of the enterprise.

Our stockholders are numerous, and scattered in every State of the Union. Those of any State can build the road if they will, with the grants of land and loan of money by Texas. We do not desire to keep alive the coals of fire which crimination and recrimination heretofore have made, to consume us well nigh; much less do we want to indulge in bickerings and ill-nature for the future. We have buried the tomahawk, and there it shall remain, unless others dig it up. It is the duty of all to convert the sword into the plowshare, the spear into the pruning-hook, and let the implements of warfare for the future be the shovel and the pick. Let there be united and harmonious action—favoritism to none, but justice to all in the administration of its affairs! My official connection with this company has grown out of its troubles, and when they are finally settled, and the affairs can be placed in better hands, it is my desire that it shall be done. It is impossible for me to remain here to receive your contributions, as I must go to other places to confer with other stockholders; I shall therefore appoint an agent here to receive your contributions, and receipt you for the same; which will be made known to you in due time. Whatever action you take, must be done promptly, as good faith and interest require us to act promptly in carrying out the spirit, letter, and intent of the compromise, which the strongest members of the new company are doing, here and elsewhere, we are proud to acknowledge, and in a spirit of zeal, as well as good faith and active effort.

Summary Statement of the Condition of the Southern Pacific Railroad Company, after making Compromise at Marshall, Texas, April 6, 1859.

STOCK LIABILITIES:

Original stock issued.....	\$3,200,000
This item includes stock issued to subscribers for cash and upon which installments have been paid, also the stock donated for services and accruing interest thereon. These figures are not given as precisely correct, but are substantially so.	
Stock issued as collateral security for moneys borrowed for the company,	480,000
Total stock liabilities.....	\$3,680,000
This liability it is now proposed to reduce and change in form and manner as follows:	

1. By the surrender to the company of stock, upon which \$5 per share has been paid, amounting to.....	\$500,000
2. By forfeited stock, upon which about \$2.5 per share has been paid and which has been forfeited for non-payment of subsequent calls and installments, about.....	\$500,000
3. By payment of \$30,000, being part of the \$500,000 cash debt and for which the stock of the company is held as collateral security, to the amount of.....	\$450,000—1,480,000
Total stock.....	\$2,200,000
Which is to be reduced under the policy one-half, say.....	1,100,000
Total stock under new policy.....	\$1,100,000
Cash liability of company when compromise was made, about.....	500,000
This item includes the \$37,400 for which the \$14,400 of stock is hypotheated. The figures are not presented as the exact amount, but they are substantially correct.	
Total liabilities.....	\$1,600,000
Stock liabilities as above.....	\$1,100,000
Amount of cash liability converted into stock.....	140,000
Total stock at present.....	\$1,240,000
Since the date of the compromise, April 6, 1859, and the present making up of this statement, about \$140,000 of the \$500,000 cash liability above stated, has been actually settled on the basis now proposed for the liquidation of the balance of this \$500,000 of debt, viz: By the insurance of an equal amount of the stock of the company at par, in liquidation of the same amount of its cash liability. Leaving cash liability at present about.....	
	350,000
Total liability.....	\$1,600,000

ASSETS:

25 miles of unfinished road at \$25,000 per mile.....	625,000
250,000 acres land, at \$3 per acre, (valued by the surveyor and locator at from \$5 to \$10 per acre).....	768,000
Bonds and mortgages and other property of the company, valued at and worth the sum of.....	400,000
Total assets.....	\$1,793,000
Deduct total liabilities.....	1,600,000
Excess of assets over liabilities.....	193,000

The stock of the company, in its property and assets, will be seen from the foregoing statement and summary, to be worth at least par, on its face value, without estimating the immense value of the rights and franchises of the company.

The new policy of the company proposes the sale of stock to the amount of \$1,000,000 more, to raise a fund to purchase labor for the completion of the road. The labor thus bought will be property representing the stock sold for means to purchase it. Consequently its increase in quantity, for this purpose, will not lessen its value, but greatly increase it, by providing the means to develop the enterprise, thereby adding millions upon millions to the stock of the company's wealth.

It is doubted if more than \$3,000,000 of stock need be sold; if so, this small amount of associate capital reaps the profits of this stupendous enterprise. The lands of the company, assuming the Illinois Railroad Company as a basis of calculation, will construct the road and have a surplus of some \$30,000,000 for distribution to stockholders. The dividends annually of millions of revenue from the earnings of the road, when completed, must also accrue to the \$3,000,000 of capital, which, as before stated, it is believed, will be ample in amount for the accomplishment of all the objects of the company.

I will not descend further to details. This will lead the intelligent, calculating minds of stockholders to judge for themselves what is their interest and their duty. If any elect not to avail themselves of their rights and privileges, others more calculating, stand ready to invest their capital, and to respond to the wants of the company.

JEPHTHA FOWLKES, President.

RAILWAY SAFETY.—It appears, from the best statistics, that in the last four years the risk to each passenger of being killed in traveling one mile was:—By railroad in France, 1 in 100,000,000; in England, 1 in 65,360,000; in the United States, 1 in 47,164,000; and by steamers, 1 in 240,000. If these estimates are correct, the chances of being killed are not near so great as most travelers are willing and often anxious to risk, or we should hear of more frequent and urgent requests to railroad companies to reduce the speed, and thereby increase the safety.—*Artisan.*

ROCK ISLAND BRIDGE AND THE SECRETARY OF WAR.

What power and jurisdiction has the War Department over the navigation of the Mississippi River? Why does the Secretary of War involve his department in the legal controversy now going on between the St. Louis Chamber of Commerce and the Bridge Company? Is it for the purpose of influencing public opinion or making testimony for either party? These questions have been so often put to us, that we have taken pains to get the necessary facts and propose to answer them.

1st. The War Department has no jurisdiction over the navigation of the river; it is not charged with the protection of it, and any interference on its part is without the authority of law, and is entitled to just as much weight and consideration as the acts done, and the motives inducing such action, would have, coming from an individual.

2nd. As to the reasons why the Secretary of War has engaged in this quarrel, we propose to let the documents speak for themselves. In the following letter the Hon. gentlemen who signed it could not know personally the accuracy of the facts recited. The statement that "many" steamboats have been entirely destroyed, is not true. Only one boat has been lost at the bridge—the Effie Afton. Her owners have once tried the question of the liability of the Bridge Company, and failed to recover—nine of the twelve jurors believing that the fault was with the boat and not with the bridge.

[COPY.]

To the Hon. J. B. FLOYD, Secretary of War.

A question affecting very materially the interest of all persons navigating the Western rivers, has been raised by the erection of a Railroad Bridge over the Mississippi river, between Rock Island, in the State of Illinois, and Davenport, in the State of Iowa.

The testimony given by captains of steamers, pilots and other river men conflicts with that of most of the Civil Engineers who have examined the structure.

These Civil Engineers, however, being in the employ of different Railroad Companies, their opinions are open to the charge of prejudice, as by many persons the question is regarded as simply one between the Railroad and River interests.

One thing is certain: Sixty-four steamers and a large number of rafts have been more or less injured upon this bridge—many of them entirely destroyed. In one instance the amount of loss was nearly two hundred thousand dollars.

Two suits in equity are now pending in the Supreme Court of the United States relative to the said bridge, in one of which the United States are the complainants.

It seems to the undersigned very desirable that this structure should be examined by some Engineers whose judgment would not be liable to be warped by any local or other prejudices; and we therefore request that you will appoint a Commission, to be composed of three Army Engineers, to proceed to Rock Island soon after the opening of navigation, and examine said bridge and make their report thereupon.

Mr. J. W. Bissell, the Agent of the St. Louis Chamber of Commerce, is now in this city, and is understood to be authorized to defray the expenses of such a Commission.

WASHINGTON, February 24th, 1859.

C. C. WASHBURN,

TRUSTEN POLK,
JAMES S. GREEN,
J. P. BLAIR, JR.,
JOHN S. PRUEPPE,
W. S. GROESBECK,
GEO. H. FENDLTON.

We suppose that this letter was prepared by Mr Bissell, the Agent of the St. Louis Chamber of Commerce, and is entitled to just such weight as the representations of such a partisan would be, and no more. That he should attempt to cast a slur upon the impartiality of the "Civil Engineers who have examined the structure," and ignore entirely the prejudices of "captains, pilots and other river men," results very naturally from his employment and the side on which he is engaged. We do not believe the signers of the letter intended to sneer at any set of men. The statement that "sixty-four steamboats have been more

or less injured," is a misrepresentation; the fact being that there have been over three thousand passages of steamboats through the draw of the bridge, and only thirty-two injured; and nearly all of those that have received damage there, have passed the draw in safety both before and after the dates that they received the injuries.

The following is a copy of the letter, appointing a Board of Examiners:

BUREAU OF TOPOGRAPHICAL ENGINEERS }
Washington, March 1, 1859. }

Sir: I have the honor to acknowledge your direction to select, from the Corps of Topographical Engineers of the Army, three officers, for the purpose of examining and reporting upon the construction of the Railroad Bridge across the Mississippi River, between Rock Island, in the State of Illinois, and Davenport, in the State of Iowa, in its bearings upon the navigation of the Mississippi River, and I respectfully recommend that Captain A. A. Humphreys, Capt. Geo. G. Meade, and Capt. Wm. B. Franklin, of the Corps of Topographical Engineers, constitute a Board of Engineers for such purpose. It is proposed that the Board shall examine and report:

1st. Whether the Railroad Bridge which crosses the Mississippi River between Rock Island, in the State of Illinois, and Davenport, in the State of Iowa, is constructed according to correct principles, reference being had to the interest of navigation.

2d. Whether the piers of said bridge are of the best form, and, if not, whether the best form is practicable at that place, and what is the effect of the defective form.

3d. Whether any of the piers are larger than necessary, and if larger, how much larger, and what is the effect of this increased size upon the passage of water and of steamboats.

4th. Whether the piers are placed as near as possible parallel with the current, and if not parallel, find the angle as near as possible, and ascertain the effect of the obliquity upon the passage of water and of steamboats.

5th. Ascertain the velocity of the current above and below the bridge, and in the draw passage.

6th. Ascertain the size, as near as possible, and the position of the eddies near the steamboat passage, and whether they interfere with the passage of steamboats.

7th. Ascertain, as nearly as possible, the height and extent of the removals caused by the pier on which the draw turns.

8th. If said bridge is badly located and is an obstruction to the passage of steamboats and rafts, ascertain whether there is any point in the vicinity where a bridge might have been located so as to cause less obstruction.

9th. And to make such other examinations as the Board may deem necessary during the progress of the investigations.

The report of the Board will be made to the Colonel of Topographical Engineers.

It is understood that the expenses attending the investigation shall be borne by the St. Louis Chamber of Commerce, there being no funds in this Bureau applicable to the purpose.

Respectfully, sir, your ob't servant,

L. C. WOODRUFF,

Capt. Top'l En'srs, Ass't in charge.

HON. JOHN P. FLOYD,

Secretary of War,

The points named in this letter of instructions never originated in the War Department—they were undoubtedly the work of the same *disinterested agent* that drafted the original application addressed to the Secretary of War. When the Department had selected men of such standing and acknowledged ability in their profession as Captain Humphreys, Capt. Meade and Capt. Franklin, we would ordinarily suppose that general instruction to ascertain the location and construction of the bridge and its effect upon navigation, would have been sufficient, and any further instructions, such as contained in the foregoing letter, to gentlemen of their acknowledged capacity and sterling integrity, we think will be considered by all right thinking men as having a purpose. We can see no reason in the wants of the War Department, why these various specifications were made, and it must have been done by some outside influence to so direct the action of the Board of Examiners as to prepare them for witnesses upon the points supposed to be involved in the suits now pending. The communication to the Secretary of War says truly that: "The testimony given by captains of steamers, pilots and other river men, conflicts with that of most of the Civil Engineers who have examined the structure." The contest thus far has been that of ignorance, prejudice and passion, against the best engineering talent in the Union. To head this foray, the St.

Louis Chamber of Commerce have had the rare good luck to secure the services of a broken-down Rochester broker, who only dates his engineering experience five years back, and whose most notable exploit was the building of a Suspension Bridge over the Genesee river, that fell down with the weight caused by six inches of snow. The labors of this professional charlatan, aided by the lavish expenditure of money levied upon the Chamber of Commerce, the owners of boats, and reaching for his subsidies even to the New Orleans Board of Trade, have as yet been unable to overcome the examination of scientific Civil Engineers; and the practical answer given to all this hue and cry by the fact, that there has been over three thousand passages of boats through that draw since the completion of the bridge in 1856. What is to be the effect of this action of the War Department—whether it will aid in establishing the truth of a remark of one of the boatmen, that "the Upper Mississippi was an inheritance, St. Louis owned it, he was one of the heirs, and no d—d bridge should get in his way," or whether it will tend to relieve the Bridge Company from further expensive litigation, by establishing, upon a broad basis of reason and justice, the rights of overland commerce, remains to be seen.—*Chicago Tribune.*

ANNUAL CONVENTION OF STOCK-HOLDERS OF THE GREENVILLE AND COLUMBIA RAILROAD.

The stockholders in the above road met in convention, in their hall, in this city, yesterday, at 11 A. M. There was a very large representation present, every seat in the hall being occupied. Hon. T. C. Perrin, President of the road, took the chair, in accordance with the time-honored custom of this company, an impressive petition to the Throne of Grace was made by the Rev. Mr. Wightman.

The President then stated the first business in order, to be the taking of the amount of stock represented, and stockholders representing stock individually were requested to give in their names, together with the amount of stock they represented. The President also called upon the proxies, on the part of the State, and City Councils of Charleston and Columbia, to announce their names. Hon. B. F. Perry and Hon. J. Foster Marshall appeared as proxies for the State; H. T. Peake, Esq., for Charleston, and Captain J. M. Allen, for Columbia.

On motion of Mr. J. P. Reed, the President read the annual reports of the President and Directors, and General Superintendent, which, together with the account 'ables of the Auditor and Treasurer, as vouched for by the committee appointed to investigate them, were submitted to the convention as the annual reports for the past year.

Gen. James Gillam, from the Committee on Proxies, made the following reports: Represented by proxy, 14,143 shares; in person, 14,263 shares; total, 28,406; whole amount of shares of the Company, 60,150; number of shares owned by the State deducted, 17,405; total, 42,745; number necessary to a quorum, 21,373. 28,406 shares being reported, a quorum was consequently formed.

On motion of Hon. J. B. O'Neill, the report was laid on the table.

The President then announced the convention as organized and ready to proceed to business.

On motion of Mr. T. M. Cox, the report of the President and Directors, and of the Superintendent were accepted by the convention.

On motion of the Hon. J. B. O'Neill, the reports were ordered to lie upon the table, and be printed with the proceedings of the convention.

Mr. Perry moved that 4 o'clock in the afternoon be fixed as the hour for the election of officers; which was carried.

Mr. Branch asked for information as to whether it was the rule of the Company to permit retired conductors to pass over the road free of charge.

The President said that the rules on that subject are very stringent, and provide that no conductor can permit a free passage to any individual, unless he had a ticket from either the Superintendent or President of the road; and for violation the conductor is liable to be fined for the amount.

Mr. Smith moved that before going into the election for officers, that the salary of the President be reduced to \$2,500, instead of \$3,500. Laid on the table.

On motion, the convention took a recess until half past 3 o'clock,

AFTERNOON SESSION.

The convention re-assembled at 3½ o'clock. Mr. Jones submitted the following resolutions:

1. To unite the offices of President and Superintendent. 2. That services of conductors of freight trains be dispensed with, and the duties at present performed by them devolve upon the engineers. 3. That the Treasurer be directed to pay the interest now due on the assessment from the first funds that come into his hands from the income of the road. 4. That the freights list be revised. 5. That the number of overseers now employed by the company be diminished one-half. 6. That the number of supervisors be reduced to two. Mr. Jones followed up his resolutions, by giving the reasons that actuated him in offering them. The resolutions elicited considerable discussion, and finally were ordered to lie on the table.

Mr. Perry offered the following resolution, which, after some discussion as to its legality—the charter of the company requiring the stockholders to elect a President and twelve Directors at the annual meetings—was passed:

Resolved, That hereafter at all meetings of stockholders of this Company, some stockholder other than the President or Directors shall be called to the chair to preside over their deliberations.

Mr. Strauss, on the part of the managers of the election, announced the following result:
For President—Hon. T. C. Perrin.

For Directors—Hon. J. B. O'Neill, Simeon Fair, T. M. Cox, D. Blake, C. G. Memminger, J. P. Reed, J. M. Allen, V. McBee, Hon. J. N. Whitner, J. F. Livingston, C. Smith, R. Stewart.

The President returned his warm thanks to the convention, and gave a cheering description of the finances and condition of the road.

The following resolution was adopted:

Resolved, That original stockholders shall pass to and from the conventions as heretofore; but purchasers of stock who are not original stockholders must have twenty-five shares in order to entitle him or her to pass as an original stockholder.

A resolution was also passed that so much of the proceedings of this convention as the directors may think proper be published in pamphlet form for the use of the stockholders.

A committee from the Spartanburg and Union Railroad appeared, and expressed a wish to be heard in reference to matters of in-

terest to both roads. Col. Perrin stated that the committee should be heard before the Board of Directors.

On motion, the convention adjourned *sine die*.—*South Carolinian*.

THE METAL CROP OF THE WORLD.

An examination of the crop of metals produced in the great harvest field of our globe, leads to some striking and interesting facts. Until the discovery of the gold fields of Australia and California, the crop of precious metals throughout the world maintained as uniform a production as the cereal or other crops, and even since these discoveries the rate of production, so suddenly and enormously expanded, has subsided into regularity. The amount of glittering dust shipped yearly from San Francisco, Melbourne, and Sydney, is now as accurately estimated as cotton, wheat, tobacco, or any of our great staples.

The value of precious metals produced per annum in the United States as compared with Europe, is estimated in round numbers in the *Encyclopedia Britannica* thus: United States, sixteen millions of pounds sterling; Great Britain, twenty millions ditto; the Russian Empire, five millions; France, only three millions; the Austrian Empire, less than half a million; Prussia, a little upwards of four millions; Belgium, nearly two millions; Spain, a million and a half; Sweden and Norway, a million; Saxony, three hundred thousand; the Hartz District, rather more, and Italy considerably less than half a million; and Switzerland only seventy-eight thousand pounds sterling. The annual average of precious metals in Australia is put down at £8,214,167; Mexico and Chili foot up about nine millions sterling, and the rest of South America, exclusive of Chili, gives less than three and a half millions. According to this estimate, the grand total of the crop of precious metals produced annually in Europe and America, including Australia, is nearly seventy-six millions of pounds sterling, in exact numbers—£75,875,060.

Mr. Whitney's table of the metallic produce of the world for the year 1854, presents some interesting facts. Russia in that year is supposed to have produced some 60,000 pounds troy of gold, and 58,000 pounds of silver. Of copper she produced 6,500 tons, 4,000 tons of zinc, 800 tons of lead, and 200,000 tons of iron. The disproportion here between the precious and useful metals is very striking, as will be seen by a comparison with Great Britain. The gold of Great Britain, in 1854, is estimated at 100 pounds troy; silver, at 70,000 pounds; tin, 7,000 tons; copper, 14,500 tons; zinc, 1,000 tons; lead, 61,000 tons; and iron, 3,000,000 tons. In the same year, the United States, including California, is supposed to have produced 200,000 pounds troy of gold, 22,000 pounds of silver, 1,000,000 pounds avoirdupois of mercury, (Great Britain and Russia producing none at all), 3,500 tons of copper, 5,000 of zinc, 15,000 of lead, and a million of tons of iron.

The great country for mercury is Spain, which produced, in 1854, two and a half millions of pounds. Next comes the United States, with a million of pounds, as we have seen; then Austria, with 500,000 pounds, and finally Peru, with 200,000 pounds. The tin crop is larger in Great Britain than any where else on the globe. To her 7,000 tons; the East Indies and Southern Asia bring 5,000 tons; Peru, 4,500; Saxony, a hundred tons; Austria, fifty; and Spain, ten tons. Great Britain also surpasses all other countries in

the production of copper, and will continue to do so until some facile process of making marketable the vast masses of native copper which abound in the Lake Superior region is discovered. Next after Great Britain comes Chili, with 14,000 tons of copper; then Russia; then Australia and Oceania, producing 3,500 tons; the same in the United States; Austria, 3,300 tons; then the East Indies and Southern Asia, with 3,000 tons; and so on, Saxony closing the list with bare 50 tons. France, Switzerland, Mexico, and Brazil, it seems, produce no copper at all, at least none is set down in Mr. Whitney's table. Cuba produces 2,000 tons, Africa only 600 tons.

Mexico takes the palm in silver, the product of 1854 amounting to 1,750,000 pounds troy. Chili ranks next, at 250,000 pounds; Ecuador and New Granada are put down at 130,000 pounds; Bolivia the same; Spain 125,000 pounds, and so on; Brazil closing the list with only 700 pounds. Prussia and the Hartz District yield the same, 30,000 pounds each. Saxony gives 60,000 pounds; France 5,000 pounds; Italy, Africa, the East Indies, Southern Asia and Cuba, do not appear in the silver list.

In the gold column, we find the United States taking the lead at the head of 200,000 pounds; next Australia, 150,000 pounds; Russia as before stated, 60,000 pounds; East Indies and Southern Asia 25,000 pounds; Ecuador and New Grenada 15,000 pounds; Mexico 10,000 pounds; Brazil 6,000 pounds; Austria 5,700 pounds; and Africa, 4,000 pounds. Spain brings only 42 pounds; the Hartz District gives but 6 pounds, and poor Sweden a miserable 2 pounds. Norway, Belgium, Prussia, Saxony, Switzerland, France, Italy and Cuba make no return to the gold column.

From Mr. Whitney's letter, it appears that Great Britain takes the lead of the United States not only in silver, tin, copper, and iron, but in lead also. The product of this metal for 1854, in Great Britain, is set down at 61,000 tons, against 15,000 tons in the United States. We had supposed that the lead mountains of Missouri would have given a very different return. Even Spain produces twice as much lead as the United States, the yield in 1854 being put down at 30,000 tons. Prussia produces 8,000 tons; Austria 7,000 tons; the Hartz District 5,000 tons; Saxony 2,000 tons; France 1,500 tons; Belgium 1,000 tons; Italy 500 tons; and, lowest of all, Sweden 200 tons. As regards the iron crop, we have seen Great Britain and the United States heading the list, the former with three and the latter with one million of tons. France comes next with 600,000 tons; then Belgium 300,000 tons; Russia 200,000 tons; Prussia 150,000 tons, and so on, Norway bringing up the rear with 5,000 tons. The grand total of the metallic produce of the world for 1854, as summed up by Mr. Whitney are: Gold, 479,950 pounds troy; Silver, 2,812,200 pounds troy; Mercury, 4,200,000 pounds avoirdupois; Tin, 13,660 tons; Copper, 56,850 tons; Zinc, 60,550 tons; Lead, 133,000 tons; and Iron, 5,792,000 tons.

BARREN COUNTY (KY.) RAILWAY.—The *Glasgow Free Press* states that this road is in a fair way of being constructed at an early day. A new board of Directors has been elected, as follows: Messrs. Jas. G. Page, W. R. McFerreran, Haiden Dodd, Travis Cockrill, Joseph T. Black, Wilburn Bybee, and Joseph H. Lewis.

James R. Barrick was unanimously re-elected President for the ensuing year. The new Board is composed of active and influential men. From the same source we learn that Mr. John T. Cox has been re-elected Chief

Engineer. Six miles of the road, embracing all the heavy work upon the line, and extending from the depot in Glasgow to a point beyond the "Carden Summit," has been favorably contracted to Messrs. J. R. & W. F. Redding, experienced and reliable contractors, the company reserve the right of accepting or rejecting, as they may choose, within a reasonable time, the Messrs. Redding's bid for the remainder of the work. These gentlemen propose putting a sufficient force on the work in a very short time. We learn that the Company did not deem it important just now to let the entire work, from the fact that the portion uncontracted for is light work, which may be begun six months hence, and still be completed as early or earlier than the portion which they have let.

IMPORTANT DECISION.

WASHINGTON, Thursday, April 21, '59.

An important decision has been made by the Secretary of the Interior in respect to the rights of the St. Paul and Fond du Lac Railroad to lands upon its route, under grants of Congress. It is understood that the decision applies to other roads in Wisconsin. The points reported are as follows: the title to odd numbered sections within six miles did not rest on survey, unless the route was staked off or marked on the ground so as to be readily found where passing through any one section. For that part of the route where the line of location is laid off on a map, the date of acceptance by the Land Office is the date of the vestiture of the section in place, if the mapping was on a plat showing the section lines of the public survey, and thereby fixing definitely the exact line where the road would fall, and determining the six mile limits of the grant. For the part of the route extending through unsurveyed lands or townships not subdivided, the acceptance heretofore must be regarded as only preliminary, and there is not a vestiture or severance till the plats showing the connection of the route with the public surveys are filed in the General Land Office, and accepted. There has been no vestiture of the title of the lands between the six and fifteen-mile limits of the road. There is only a withdrawal in view of a future adjustment. Pre-emptions in townships surveyed and platted since 1859, which have been admitted at the local Land Offices in good faith, before the receipt of the specific instructions of 1858 to the contrary, are affirmed—the right of pre-emptors in townships restored. So with the pre-emption by notice of those who can show that they settled in good faith before the 15th of April 1858, and did all they could under legal requirements, are now to be entitled to prove up and pay for their lands. This last is applicable only to the strip between the six and fifteen mile limits, as presented in the cases before the Department.

THE CAMANCHE, ALBANY AND MENDOTA RAILROAD.—A meeting of the Directors of this Company, was held lately in Chicago. Gen. Chas. B. Stewart, President; N. A. Gurney, Chief Engineer; Samuel Hopper, Treasurer; George Wells and E. C. Waters, Directors, and Milo Russel, the Attorney of the Company, were in attendance. This road, commencing at Mendota, runs through the interior of Illinois, crossing the Mississippi river at Albany, Illinois, to connect with the Chicago, Iowa, and Nebraska road of Iowa, through the untiring exertions and perseverance of the President and Chief Engineer, and the able manner in which they are sustained by the directors, rapidly approaching to its completion.

MONETARY AND COMMERCIAL.

The demand for money has been somewhat increased since our last issue, the supply is, however, still abundant, and the market easy for first class paper at from 9 to 12 per cent. The late foreign news has had the influence of creating an active speculative demand for bread stuffs which will employ a large amount of surplus capital, and will be felt by all branches of trade.

Eastern Exchange is in less demand than for some time past, and rates have a downward tendency.

Prices of a few leading stocks, at New York, on the 30th of April and 7th of May, compare as follows:

	April 30.	May 7.
Missouri.....	87½	86½
New York Central.....	73	71½
Reading.....	51½	50½
Erie.....	8½	7½
Hudson River.....	31½	32½
Michigan Central.....	50½	46
Michigan Southern guaranteed.....	33	46
Panama.....	122	122½
Illinois Central.....	65	67½
Galena.....	64½	63½
Rock Island.....	68½	59½
Pacific Mail.....	77½	85½

The weather for the past two weeks has been very favorable for the growing fruits and crops, and the indications now are that the yield of the Ohio Valley will be one-third greater than ever before.

From personal observation in this and adjoining States, we feel prepared to say that the prospects for an abundance in the products of the field, the orchard, the garden and the vineyard were never better.

The Philadelphia *North American* of a recent date contained some particulars of the through business of the four trunk lines, which bear a special interest in the present stage of the railroad controversy. The tonnage of these lines in 1857 and 1858, as regards this department of their transportation, was as follows:

	1857.		1858.	
	Th. E. Tons.	Th. W. Tons.	Th. E. Tons.	Th. W. Tons.
Pennsylvania.....	94,905	77,163	141,968	79,942
New York Central.....	119,647	113,230	229,275	83,133
New York and Erie.....	117,828	30,271	224,886	60,669
Baltimore and Ohio.....	161,083	63,488	170,084	54,779

The main features of this comparison are thus noticed:

The through tonnage, east of the Pennsylvania Railroad, appears in both tables to be less than that of the other three lines. In the year 1857 this difference was much more than in the next year, being in 1857 no less than 62,923 tons less than the next lowest, which was the New York and Erie, while in 1858 it was but 38,816 less than the next lowest, which was the Baltimore and Ohio. The through business west shows a different state of things. In that the Baltimore and Ohio ranks lowest in both years. And while in 1857 the Pennsylvania ranked third in the list, in 1858 it ranked second. What is more, our road increased its through tonnage west, while that of all the other roads fell off. In 1857, there was a difference of 36,062 tons between the through tonnage west of the Pennsylvania Railroad, and that of the highest line, the New York Central, whereas in 1858 the difference fell to 3,091 tons.

We extract, also, from the same journal, the following particulars of the through travel:

	1857.		1858.	
	No. pas- sengers East.	No. pas- sengers West.	No. pas- sengers East.	No. pas- sengers West.
Pennsylvania.....	16,396	21,272	15,302	12,771
N. Y. Central.....	76,061	87,977	77,970	67,259
N. Y. and Erie.....	28,913	27,687	24,233	22,573
Balt. and Ohio.....	14,465	23,851	13,634	21,417

The Baltimore and Ohio road does the mass of the passenger business between the West and the national capital, which is very rapidly increasing, and also the commercial travel to and from Baltimore. And yet, with this ad-

vantage, its through travel is not large. The New York Central transacts all the passenger business between Boston and the greater part of New England, New York and the West, besides the travel to and from foreign ports, passing through New York on account of its numerous lines of foreign steamers and pack-ets. The New York and Erie Railroad is a competitor for the latter, and with the aid of having its terminus at the harbor of New York, it is not strange that it obtains more of this travel than our line.

GEORGIA AIR LINE RAILROAD.—We have before us a copy of the report of John E. Blount, Chief Engineer of the "Georgia Air Line Railroad," from which it appears that "contracts have been closed on eleven miles of the Road in Mart County, amounting to \$60,000; six miles and a half of very light work still remain to be let." "All the work from Gainesville to the Gwinnett line has almost been let; estimated at \$55,000 for fourteen miles.—Operations have been commenced on both divisions, still the work will not be pushed until crops are laid by." A memorial from the President, J. Norcross, and the Directors, E. W. Holland, Geo. Kellogg, and L. E. Bleckly, to the Hon. Mayor and Council of the City of Atlanta, discloses the fact that "a total amount of stock of \$762,000, has been subscribed, in the counties of Jackson and Madison." As we understand the case, when \$750,000 of stock was subscribed in good faith, the \$200,000 subscribed by the city of Atlanta, was to be considered valid and binding. A call has been made upon the city authorities for an installment on their stock, which they refuse to pay, on the ground that the \$750,000 has not been subscribed *bona fide*. This difference of opinion between the authorities of the Air Line Road and those of the city, is peculiarly unfortunate. Not knowing the merits of this controversy, we forbear giving any opinion, but must content ourselves with the hope that this matter will soon be mutually understood and amicably adjusted.—*Atlanta Intel.*

EIGHTH ANNUAL MEETING OF THE STOCKHOLDERS OF THE K. M. R. R. COMPANY.—Pursuant to notice, the Stockholders of the King's Mountain Railroad Company, held their 8th annual meeting at York Court House, on Thursday, 21st instant. The meeting was organized by calling Edward Moore, Esq., to the Chair, and requesting Jno. L. Miller to act as Assistant Secretary.

Mr. H. F. Adickes, S. W. Melton and Dr. J. F. Lindsay, were appointed a Committee to verify proxies, who reported that a majority of the stock was represented.

The President submitted the annual report. The Superintendent submitted his report, which, on motion of H. F. Adickes, together with the report of the President, was adopted.

On motion of W. A. Latta, Esq., the time of holding the annual meeting was changed from the third Thursday in April, to the 2d Monday in February. Also, that the President and Directors declare semi-annual dividends.

On motion of J. S. Ryan, Esq., they were instructed not to exceed four per cent. dividends, semi-annually.

The meeting then entered upon the election of officers for the ensuing year. The following is the result:

Dr. J. M. Lowry, *President*. Directors:—S. G. Hemphill, W. A. Latta, B. T. Wheeler, E. A. Crenshaw, H. F. Adickes, J. W. Avery, J. R. Bratton, J. S. Ryan.

On motion of W. A. Latta, Esq., it was ordered that the proceedings, together with the reports of the President and Superintendent,

be published in pamphlet form, for distribution among the stockholders.—*Yorkville Enquirer.*

WHEELER & WILSON'S



SEWING MACHINES.

W. M. SUMNER & CO., cor. Fourth and Walnut Streets, second floor, Cincinnati, Ohio.

BRANCH OFFICES:

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We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a GOOD, LOW-PRICED FAMILY MACHINE, have introduced a *new style*, working upon the same principle, and making the same stitch, though not so highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being ALIKE ON BOTH SIDES, impossible to ravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions, free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

Send or call for a circular, containing all particulars, prices, testimonials, etc.
WM. SUMNER & CO.

RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, at shipping ports in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON & CO.
New York, Ap 3, 1856. 9 South William Street.

G. G. LOBDELL. H. S. M'COMBS. D. P. EUSH.

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MANUFACTURERS OF

CHILLED WHEELS

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TIRES,

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent
FOR THEIR

CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE,

WITH OR WITHOUT AXLES.

WHEELS FITTED

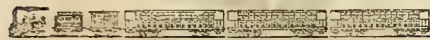
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In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

CHICAGO, Great Western and North-Western ROUTE.

INDIANAPOLIS & CINCINNATI SHORT LINE



RAILROAD.

(VIA LAWRENCEBURG.)

Distance 110 Miles and No Change of Cars Between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS LEAVE CINCINNATI daily, (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6 A. M.—Chicago and Terre Haute Day Express—Through to Terre Haute, Lafayette, and Chicago, with but one change of cars.

SECOND TRAIN, 4:15 P. M.—Accommodation—The 4:15 P. M. train arrives in Indianapolis at 10:10 P. M.

THIRD TRAIN—Chicago and Terre Haute Night Express—8 P. M.—Arrives at Indianapolis at 1 A. M. This train runs through from Cincinnati to Chicago, with but one change of cars.

The above trains make close connections at

Indianapolis, Lafayette and Chicago,

WITH TRAINS FOR

Terre Haute,	Lafayette,
Springfield,	Jacksonville,
Rock Island,	Danville,
Galesburg,	Burlington,
Kenosha,	Milwaukee,
Mattoon,	Pana,
Naples,	Peoria,
Galena,	Dunleith,
Quincy,	Bacine,
Prairie du Chien,	Decatur,
Bloomington,	Joliet,
LaSalle,	St. Paul,

And all towns and cities in the North-west.

Connections are also made at Indianapolis with the Peru and Indianapolis Railroad for Kokomo, Peru, Logansport, Fort Wayne, Toledo and Detroit.

Be sure you are in the right Ticket Office before you purchase your ticket, and ask for tickets

Via Lawrenceburg & Indianapolis.

THROUGH TICKETS,

Good until used, may be had at the Company's Offices, north-west corner Broadway and Front Streets, under Spencer House.

A. HAMILTON, Ticket Agent.
No. 1 Burnet House, north-west corner Third and Vine Streets.
W. M. STARK, Ticket Agent.

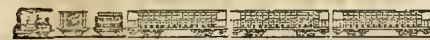
Also at the Walnut Street House.

J. S. SHACKELFORD, Ticket Agent.
And at the Depot, where all necessary information can be had.
H. C. LORD, President.

W. H. L. NOBLE, General Ticket Agent.

Commencing April 10, 1859.

OHIO & MISSISSIPPI



RAILROAD.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCENNES, Cairo, and St. Louis, at 8:30 A. M., and 8:30 P. M.

Accommodation train at 5 P. M.; for Evansville at 8:30 P. M.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natches and New Orleans.

One Through Train on Sunday, at 8:30 P. M.
RETURNING.—FAST LINE.—Leaves East St. Louis, (Sunday excepted) at 7 A. M., arriving at Cincinnati at 10:10 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 2:40 P. M., arriving at Cincinnati at 7 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the offices: Walnut Street House, bet. Sixth and Seventh Streets, No. 1 Burnet House, corner office; north-west corner of Front and Broadway; Spencer House Office; and at the Depot, corner of Front and Mill Streets.

P. W. STRADER, General Ticket Agent.
If Omnibuses call for Passengers.

Commencing April 11, 1859.

LITTLE MIAMI —AND— COLUMBUS AND XENIA RAILROAD.

FOUR TRAINS DAILY.

Three Through Express Trains.

FIRST TRAIN—No. 1 Express, at 6 A. M., connects via Columbus and Cleveland; via Columbus, Crestline, and Pittsburg; Detroit via Cleveland and Steamers. This train stops between Cincinnati and Columbus, at Loveland, Deerfield, Morrow, Xenia, Cedarville, South Charleston, London, and West Jefferson.

SECOND TRAIN—No. 2 Express, at 8 A. M., connects via Columbus, Bellair, and Benwood; Wheeling, via Columbus, Steubenville, and Pittsburg; via Columbus, Crestline, and Pittsburg; via Columbus and Cleveland; Detroit, via Cleveland and Steamer; Springfield. This train stops between Cincinnati and Columbus at Plainville, Milford, Loveland, Morrow, Spring Valley, Xenia and London.

THIRD TRAIN—Accommodation, at 4:40 P. M., for Columbus and Springfield.

FOURTH TRAIN—Night Express, at 11:30 P. M.; connects via Columbus, Bellair, and Benwood; Wheeling; via Columbus, Steubenville and Pittsburg; via Columbus, Crestline and Pittsburg; via Columbus and Cleveland. This train stops at Loveland, Morrow, Corwin, Xenia and London. Sleeping Cars on this Train.

No. 1 Express through to Cleveland without change.

The Night Express Train, leaving Cincinnati at 11:30 P. M., runs daily, except Saturdays. The other trains run daily, except Sundays.

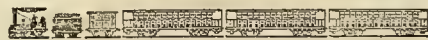
For all information and Through Tickets to Boston, New York, Philadelphia, Baltimore, Washington, Buffalo, Niagara Falls, Dunkirk, Cleveland, Pittsburg, Wheeling, and all Eastern places, please apply at the offices, Walnut Street House, No. 1 Burnet House, south-east corner of Broadway and Front Streets, and at the Eastern Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Superintendent.

Omnibuses call for passengers by leaving directions at the Ticket Office.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE.

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the

West, South-West and North-West.

Fare to New York and Boston ONE DOLLAR less than via any other route.

TWO TRAINS

Leave Wheeling daily at 8:05 P. M., and 11:30 A. M.

Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.

Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2.

Quick time and sure connections.

If Inquire for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

E. F. FULLER,

General Western Agent.

L. M. COLE,

General Ticket Agent.

W. P. SMITH, Master Transportation.

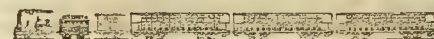
WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, STROBRIDGE & CO.,
119 Walnut st., Odd Fellows' Building
Jan 8 1y

April 11, 1859.

Cincinnati, Hamilton and Dayton,



RAILROAD.

FOUR TRAINS

LEAVE THE SIXTH STREET DEPOT DAILY.

TRAINS RUN THROUGH TO RICHMOND, LIMA, SANDUSKY, AND DELAWARE WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND NORTH-WESTERN CITIES.

6 A. M. EXPRESS TRAIN—For Cleveland and Pittsburg, via Delaware, makes close connection at Crestline for Pittsburg, Baltimore, Philadelphia and New York; and at Cleveland for Dunkirk, Buffalo, Boston and New York. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Munice. Also, connects at Richmond with Indiana Central Road, for Indianapolis. Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

8 A. M. MAIL TRAIN—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STEAMER FOR DETROIT; at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at DELAWARE with the C., C. and C. Road, for Cleveland and Delta points East.

4:30 P. M. TRAIN—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Connects, also, at Dayton for Troy, Piqua, Sidney, Lima and Chicago. Also connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago.

6 P. M. TRAIN—For Dayton and all way stations.

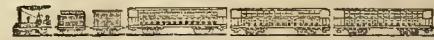
If for further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; No. 3 Burnet House; or at the Sixth Street Depot.

D. McLAREN, Superintendent.

New Time Table

OF THE

NEW YORK CENTRAL R. R.



	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp.	7 00 A. M.	7 00 P. M.	7 00 P. M.
Mail	9 10 A. M.	12 50 A. M.	
New York Exp.	11 15 A. M.	9 10 P. M.	9 10 P. M.
Night Exp.	5 00 P. M.	4 00 A. M.	4 00 A. M.
Utica Accom'n.	6 00 P. M.	Ar. U. 10 00 P. M.	
N. Y. Mail	11 15 P. M.	10 00 A. M.	10 00 A. M.
	Leave Buffalo.	Leave Bridge.	Ar. Alb'y.
New York Exp.	5 15 A. M.	5 15 A. M.	3 30 P. M.
Steamboat Exp.	8 00 A. M.	8 00 A. M.	8 00 P. M.
Mail			2 30 P. M.
Cleveland Exp.	6 00 P. M.	6 00 P. M.	4 40 A. M.
Cincinnati Exp.	11 00 P. M.	11 00 P. M.	8 30 A. M.
Utica Accom'n.			10 00 A. M.

AMERICAN AND FOREIGN TENT AGENT.

THOMAS D. STETSON,
SOLICITOR OF PATENTS,
And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about 1bs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by
March 1859. VOSE, LIVINGSTON & CO.,
Feb. 25, 1y. 9 South William St., N. Y.

Union Works, Baltimore.**POOLE & HUNT,**
Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLEYS and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ANDERSON, GATES & WRIGHT,
STATIONERS, BOOKSELLERS,

—AND—

Blank Book Manufacturers,

No. 112 MAIN STREET,

East Side, between Third and Fourth Streets.

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS.

Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,
(Successors to Jacob Ernst.)
112, Main Street, Cincinnati

SCHENECTADY
Locomotive Works,
SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,**AND TENDERS, AND****RAILROAD MACHINERY**

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding the work to any part of the country, without delay.

JOHN ELLIS, Agent.

WALTER McQUEEN Sup't. Aug 16-17
N. B.—We have two Freight Engines on hand suitable for the 4 feet 10 in. gauge. Cylinders 16 inches diameter, 22 inches stroke. Driving wheels 4½ feet diam. December 18th, 1858.

D. M. CARHART,
TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address, Respectfully Yours,

D. M. CARHART,
Box 1831 Cleveland, Ohio.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers

Removed to No. 67 West 6th St.
CINCINNATI, O.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Book-sellers, Country merchants, and others to extensive stock of Theological, Standard, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the principal manufacturers of Paper and Stationery, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

BOOKSELLERS,

Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, Envelope, Manilla, and Tea wrap-boards, Envelopes, Gold and steel Pens, Penholders, Copying Books, Ink and surses, Sealing Sticks, Mucilage, Book rests, Bill-folders and Card cases, Cash and Post Office boxes, Rubbers, Letter scales, Clips, Weights, and Files; Date Calendars, together with all other articles used in the counting-house.

Stationers,

To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly paged, including all sizes, from the small memorandum book to the large Super-Ledger, and variety of styles workmanship, order of any design, with or without ruling and warranted to be of quality of printing and durability of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

BLANK BOOK MANUFACTURERS,

We are prepared to Print and Bind books in any style desired, at rates as low as quality of work cut in this where. Our executing these authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Cards, Circulars, or tion of printing, will that we do such jobs despatch. Orders re-

Stereotype, of any description that may be desired, at the same rate as can be executed by other branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Others wishing Bill Headers, Dray receipts, any other description please bear in mind with neatness and respectfully solicited.

Publishers,

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, *Clark's Commercial Almanac*, *Boylston's History*, *Plutarch's Lives*, *Josephus*, *Spectator*, *Chain of Saved Wonders*, *Familiar Science*, *Webb's Monitor*, *Soden's German*, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive,

Books of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

43 MAIN STREET CIN.

HOYT'S WATER GAUGE

Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true high of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by
CHARLES W. COPELAND, Gen. Agent,
No. 66 Broadway, N. Y.

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP**Compound Steam Pumping Engine,**

WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use, and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings, Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855.

ENGINEERING!!

The undersigned is prepared to furnish

SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of Steam Vessels, Engines, Boilers, Mill Work, &c. Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS, And Railway Machinery of every Description, While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for ASHCROFT'S STEAM GAUGE, ALLEN AND NOYE METALLIC SELF ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK, &c. Also, for Water Gauges, Indicators, Steam Whistle.

CHAS. W. COPELAND,
Consulting Engineer,
64 Broadway, N. Y.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned

THEODORE DEHON,
6013 10 Wal
at Broadway, New York

GENERAL RAILWAY SUPPLY AGENCY. SNOOK & HILL'S PATENT LOCOMOTIVE LAMPS.

83 Liberty Street, Cor. of Broadway,
NEW YORK.

JOHN W. KELLY
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of
RAILROAD ENGINES & CARS,
ALSO AGENT FOR THE SALE OF
HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,
JUDSON'S GOVERNOR VALVE.

Orders solicited and promptly filled.

PROSSER'S PATENT
ORIGINAL LAP-WELDED
IRON AND STEEL BOILER TUBES,
SAFE FROM END TO END.
PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.
SOLE IMPORTERS.

PROSSER'S PATENT SURFACE CONDENSERS for high pressure steam, with sea or other bad boiler water, gauges, 3 cutter drills, counter-sinks, tube end cutting bars, expanders, tube scalers, steel wire and wholebone brushes, pall lever wrenches, tubes—plain or enameled, screwed together for Artesian Wells, Hollow Slabs for various purposes, Steel for Rollers.
THOS. PROSSER & SON,
27 Jan. 28 Platt Street, New York.

SOUTHERN PACIFIC RAILROAD

MARSHALL, Harrison Co., Texas,
March 25, 1859.

To the Stockholders of the Company:

I receive, by every mail, a large number of letters, from stockholders residing in various sections of the Union, making particular inquiries as to the condition of things in Texas, and the progress of the contest now going on in vindication of our common rights. It is utterly impossible to answer these letters. I could not do it, if I were to do nothing else.

I have, therefore, to say to the Stockholders that, in order to obviate the necessity of writing to each individual, I have determined to publish from time to time, weekly, semi-monthly, or monthly, or oftener if occasion requires, a concise statement of the transactions in Texas; and the progress of the contest. These Reports will be published in the Texas Republican, Marshall, Texas, R. W. Loughery, Proprietor. The Texas Republican, throughout the existing controversy, has defended the interests of the Old Stockholders. Our Stockholders who may desire to see these Reports, or to get correct information from Texas, should at once subscribe for this paper. The subscription price is \$2 50, which the publisher authorizes me to say can be sent on, by mail, at his risk.

JEPHTHA FOWLKES,

President of the Southern Pacific R. R. Co.

1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th,
low by Corby, Gossin & Co.'s make, for sale very
TRABER & AUBERY,
7 Public Landing

A Book for Every Business Man!

JUST PUBLISHED

POST-OFFICE GUIDE!

For Post-Masters and Business Men.

CONTAINING

A Complete List of Post-Offices in the United States and Territories, arranged by States and Counties; A Complete List of all Distributing Post-Offices; Rates of Foreign and Domestic Letter Postage; Rates of Printed Matter, Transient and Regular; Abstract of the Laws and Regulations of the Post-Office Department, &c., &c.

COMPILED BY E. PENROSE JONES,

Late Assistant Post-Master at Cincinnati.

Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.

U. S. BLANK AGENCY, CINCINNATI POST-OFFICE,
January, 1859.

This work has been carefully compiled and corrected by E. PENROSE JONES, Esq., late Assistant Post-Master of the Cincinnati P. O., from the Records in this Department, and other sources, and contains the most complete list of Post-Offices, especially of the Western, North-Western, and South-Western States, yet published.

MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an active pamphlet of about 100 pages. The entire matter is kept standing in type, and as the compiler is promptly advised of all New Offices, Changes and Regulations of the Department, the information is corrected up to the last day of publication, an advantage possessed by no other work of the kind.

Observe, That this list is arranged by States and Counties, making it especially valuable to business men. No similar arrangement has been published since 1856. There are 3000 more offices in this than in any book heretofore issued. The Price is one-half that of any work of the kind now published.

[Single copies sent by mail (postage prepaid) to any address, upon receiving Twenty-five Cents in Silver or Postage Stamps. Five Copies sent for \$1.00, or Twelve Copies for \$2.00.

Address,
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C. S. WILLIAMS,
194 Walnut Street,
Cincinnati, Ohio.

MOSELEY'S TUBULAR WROUGHT IRON



ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs, are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeting always Iron.

The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges.

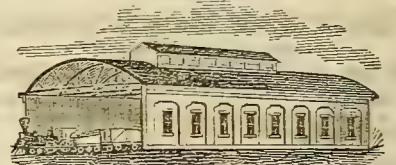
We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 4,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 persquare.

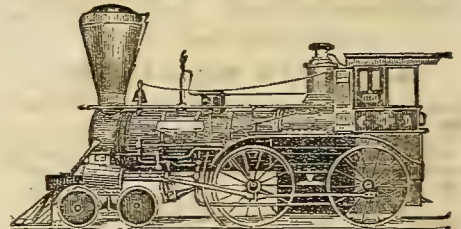
Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O.
may 13. MOSELEY & CO.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20 MOORE & RICHARDSON.

THE KENTUCKY MILITARY INSTITUTE,

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, but more extended in Mathematics, Mechanics, Machines, Construction, Agricultural Chemistry and Mining Geology; also in English Literature, Historical Readings, and Modern Languages, accompanied by daily and regulated exercise.

Schools of Architecture, Engineering, Commerce, Medicine, and Law, admit of selecting studies to suit time means, and object of Professional preparation, both before and after graduating.

The twelfth annual term is now open. Charges, \$102 per half-yearly session, payable in advance.

Address the Superintendent, at "Military Institute, Franklin Springs, Ky.," or the undersigned.

P. DUDLEY,
President of the Board

Jan. 5 tf.

The Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

Thursday Morning, May 19, 1859.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.

One square, single insertion,.....	\$1 00
" " " per month,.....	3 00
" " " six months,.....	12 00
" " " per annum,.....	20 00
" column, single insertion,.....	5 00
" " " per month,.....	10 00
" " " six months,.....	40 00
" " " per annum,.....	60 00
" page, single insertion,.....	15 00
" " " per month,.....	25 00
" " " six months,.....	110 00
" " " per annum,.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

IF The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

SOUTHERN PACIFIC RAILROAD.—A general meeting of the Stockholders of the Southern Pacific Railroad Co. will be held at the Merchants' Exchange on FRIDAY, 20th inst., at 3 o'clock P. M. The President of the Company, Dr. J. FOWLER, will be present and address the meeting, giving a full statement of present condition and future prospects of the enterprise. All persons interested are earnestly requested to attend and hear the facts and judge for themselves.

SOUTHERN PACIFIC RAILROAD.—LOUISVILLE, May 17.—At the stockholders meeting of the Southern Pacific Railroad, Alexander Bullitt was appointed Chairman.

The report was submitted, and the meeting adjourned till to-morrow.

All the Railroads leading from this city have made liberal arrangements to accommodate Pic-nic Excursions during the Summer months. The Cin., Ham. & Dayton Managers have given notice to this effect.

The New York papers state that the competition among the great lines of road for freight has virtually ended. An "arrangement" has been made that only requires the sanction of Mr. Corning to go into effect.

GOLD—ITS PROBABLE DEPRECIATION.

We have before us a recent work on Gold, and its Depreciation, by Michel Chevalier, a well known French Statesman. It is exceedingly interesting, both for the subject, the course of reasoning and the style of its author—clear and luminous. It has been translated by Mr. Cobden—one of the Commercial Statesmen of England, which, in itself, proves in what high regard it is held. The general doctrine of M. Chevalier is, that *gold must depreciate* in relation to silver, and to productive values. *Prima facie*, this would seem inevitable; for, it is a *fact*, that gold has increased in quantity, proportionably beyond any other products; and it is unquestionably true, that if we consider all products a *fixed quantity*, and measured by 1,000 ounces of gold, and then double the gold (2,000 ounces,) that the gold depreciates in value *relatively* to that extent. There is no doubt that this is substantially true, as a *principle*; but, this is not all the problem, by any means. There are other demands for gold, than simply for exchange; there is a constantly variable, and generally increasing quantity of products; and there are various customs and modes of business, and commerce, which modify the general principle. In ascertaining the relative bearing of these, consists the difficulties of the problem. To give a view of M. Chevalier's reasoning, we will make some liberal extracts.

1. THE RELATIVE SUPPLY OF GOLD AND SILVER.

M. Chevalier says:

At the commencement of the century, the quantity of gold yielded by the various countries, whose production flows to the general market of the civilised Western or Christian States, was about 24,000 *kilogrammes* of pure metal (about £3,312,000.)

But to arrive at this quantity it is necessary to include the production of several countries which then had but little commercial intercourse with the principal nations of Christendom, as, for instance, the Island of Borneo, and several other localities in the Indian Archipelago. Confining himself to the production of the American continent, of Europe, and of Asiatic Russia, M. Von Humboldt calculates that it then amounted to 15,800 *kilogrammes*, (£2,180,400.) It is doubtful if the gold which the civilised Christian nations drew from other sources, and especially from Africa, added to this supply a weight of 2,000 *kilogrammes*, (£276,000.) We might thus estimate at 18,000 *kilogrammes* (2,484,000) the amount of gold which, at the beginning of this century, arrived every year, to augment the metallic wealth of the nations of Christendom. It underwent very little increase until the working of gold mines of the Oural, and afterwards of those of Siberia, contributed, with the aid of other secondary sources, to swell somewhat suddenly the supply to threefold the above amount. Thus matters stood at the commencement of 1848, when took place the discovery of the rich deposits of California destined to be so soon followed by a similar event in Australia. At this moment we may estimate, in round numbers, the mass

of gold furnished in the Christian States at 275,000 *kilogrammes* (£37,950,000), if not more. The increase, then, is at the rate of 1 to 15 in the course of forty years, and nearly in the proportion of 1 to 5 since 1848. In silver, on the contrary, there has been but little change. The production, at the beginning of the century, was 900,000 *kilogrammes* (£7,965,000); at present it is estimated slightly to exceed a million *kilogrammes*, (£8,850,000.)

It will be seen that M. Chevalier estimates the present *production* of gold at about \$185,000,000 per annum, and this is probably true. With this prodigious increase in the crop of gold, there is *no increase in that of silver*. In regard to this fact, then, alone, gold must rapidly depreciate, as it regards silver.

2. EXPORTATION TO THE EAST.

According to the statements published by Mr. James Low, and derived from the books of the Peninsular and Oriental Steam Navigation Company, by whose agency nearly the whole of this precious freight is transported, the vessels of this Company carried from England to Asia the sum of £12,118,985, in silver, in 1856; and of £16,795,232 in 1857. In 1851 it was only £1,716,100. Besides, from the ports of the Mediterranean, there have been sent to the Levant and the remote East (India, China, and the adjacent regions), in 1856, £1,989,616; and in 1857, £3,350,689. This is for the year 1857 a total of £20,145,921, that is to say, of more than double the yield of all the silver mines that supply the markets of the Western World, I mean of Europe and America. This efflux of silver is independent of an exportation of probably one-tenth of the above amount in gold, which has been going on during the last few years. It is true that we ought to deduct from these exportations of silver to the East a certain quantity of imports, because, in these articles, alongside of the general stream there is always a certain counter-current. But we have reason to believe that for the last few years it has been but a limited sum; at any rate the amount is unknown to us.

M. Chevalier then considers the question, whether the *supply* of gold will fall off? And he, with reason, concludes to the contrary. Indeed, we now *know* to the contrary. The next question is:

3. THE NEW OUTLETS FOR GOLD.

After considering each case, he says:

In fine, according to the preceding statement, if we seek to estimate the quantity of gold which may be in request for the next ten years to complete, or re-establish on a sound basis, the currency of States which notoriously require a metallic currency, or which, subjected to the regime of paper money, are prepared to make great sacrifices to escape from it, we arrive at no very considerable result. Austria, alone, seems likely to receive a certain portion of the precious metal; and it is on a very generous hypothesis that I have carried to 145,000 *kilogrammes* of gold (£20,000,000), the amount which may be absorbed, by the process indicated in the previous chapter, in that Empire. However, to remove all pretext for opposition, I will put at more than double, at 300,000 *kilogrammes*, (£41,380,000), the total mass of gold which may during the next decennial period find a market in the Empire of Austria and other States.

4. INCREASE OF MONEY REQUIRED FOR BUSINESS.

This is the point mainly insisted upon by those who think gold will not depreciate considerably; and after reasoning fully on this subject, concludes that, the amount required for this is small, on account of the counter-acting force of other considerations, such as machinery, bills of exchange, etc., which really diminish the amount of money required for business.

By the entire of these considerations, I should perhaps be warranted if I made no addition, on account of the extension of business, to the 22,000 *kilogrammes* of gold, (£3,000,000,) which have been indicated above as sufficient to supply the wants of an increased population,—an addition which has been amply sufficient. However, to place my calculations beyond all possible objection, I will double the sum of 22,000 *kilogrammes*, which will raise to 44,000 (£6,000,000), the extension which will annually be occasioned in the gold currency, as well by the augmentation of business, as by the growth of population. I can not, however, withhold the remark that I think I have been extremely liberal: 44,000 *kilogrammes* is more than double the mass of gold which Europe received from 1800 to 1825, for every kind of use.

M. Chevalier examines in the same manner, many other means of using the new gold, and comes to these conclusions:

We thus arrive, exaggerating everything, at a total of 1,275,000 *kilogrammes* (£178,500,000), as the mass of the precious metal which may find a natural employment during the next ten years. By the words *natural employment*, I mean that it should be absorbed on the same conditions as heretofore, and consequently without being aided by a fall in the value of gold. In estimating the average annual production, for the period of ten years, now commencing, at 250,000 *kilogrammes* only (£35,000,000); and it may fairly be expected to reach 300,000 (£42,000,000), the floating mass which would remain, and the weight of which would at the end of the decennial period operate to depress the value of gold, would amount to 1,225,000 *kilogrammes* (£171,500,000), that is to say, that nearly the half of all the gold that America has furnished from the first voyage of Columbus to the discovery of the mines of California in 1848, a period of three hundred and fifty-six years.

M. Chevalier concludes thus:

Unless, then, we possess a very robust faith in the immobility of human affairs, we must regard the fall in the value of gold as an event for which we should prepare without loss of time. And who can be ignorant that the value of gold in relation to productions generally, and in relation to silver in particular, instead of being fixed, has experienced very numerous variations—that it has been undergoing modifications, sometimes in one sense, sometimes in another, from the beginning of the world, under the influence of forces far less energetic than those which are in action in our day? I refer those who desire information on this subject to a work, where an illustrious authority, Baron Humboldt, has treated it with the superiority which distinguishes him, shedding upon the question some of that vivid light which he carries everywhere with him. There will be seen, for example, that in throwing into the circulation of the Roman world a mass of gold very important, it is true, Julius Cæsar occasioned for

that metal a fall so great, that some time after it had been worth seventeen times its weight in silver it fell to be worth only nine times. If the value of gold has varied every time that new circumstances have modified the relation between the supply and demand, and if it has risen or fallen in proportion to the change which manifested itself in this relation, by what strange witchcraft are the natural causes of the fall of gold to be paralysed, now that they are displaying themselves in such unusual proportions?

M. Chevalier's conclusion is a fair and just one. In the United States, gold *has* fallen—fallen very materially; not by law, but by the *rise of prices*, by which gold is depreciated. Ten dollars in gold will not buy what *eight* would ten years ago.

Gold depreciates *relatively* in commerce long before the law notices it. The fact will soon be noticeable in all transactions.

A NEW STATE ON THE PACIFIC.

The Overland Mail from California, which arrived at St. Louis on the 8th ult., brings intelligence that a bill has passed the Legislature of that State, and been presented to the Governor, detaching the six lower counties of California, and forming them into a new Territory, to be called Colorado. This is an important movement, as it forms the nucleus around which population will cluster, and in time—not far distant either—a new State will be born on the Pacific, and added to the Union. This evidence of the growth of California, and the certainty, that in a comparatively brief period, three States at least, will border on the Pacific, render the question connected with a free and unrestricted passage over the Central American Isthmus, of vital import to the United States. Each fresh State taken into the Union beyond the Rocky Mountains, makes a safe and rapid communication with the same more necessary. In war, we *must* defend them with all the power of the Nation—in peace, we *should* be able to supply them with all the articles they need, and receive in return what surplus products they have to dispose of. In this manner a community of interests would soon be established, and the bonds of union between far distant States and people made secure and lasting. In view, then, of the certainty of the foundation of a new State being already laid on the Pacific, it becomes more important that American influence should predominate on the Isthmus. It will not do to allow England or France, or both, to stand sentinels over the transit passage, supervise our trade with the Pacific States in peace, and cripple it in war. This would be suicidal to both the old and the new States. The Pacific Ocean, which washes the shores of India and China with their hundreds of millions of population, is to be the theater of trade operations in the future. Over the bosom of this ocean is to be borne such articles of American growth and manufacture as are needed by the countless consumers of this fresh and remunerative market. To these semi-barbarous regions we stand in the light of an old, matured country, on account of our progress in all arts of a useful, utilitarian character. The shores and ports of California offer starting points for this trade, and hence the importance attaching to all movements calculated to develop the resources of the country and increase the wealth and prosperity of the people. The newly projected State on the Pacific has a significance of great breadth and

scope when viewed in the light of coming events in the Pacific and in the Old World, the markets of which must soon be open to the trade and commerce of this country.—*Pennsylvanian*.

We are as happy as our neighbor in welcoming a new born sister into the family Union, and fully agree with him in reference to the importance of easy and speedy communication with the States of the Pacific Slope. We, however, would like to ask, why not carry out the doctrine and pledge of the Democratic party to build the iron band of union, on our own soil, where no question can be raised by either England or France, or both of them, about "standing sentinel over the transit passage, supervise our trade with the Pacific States in peace, and cripple it in war." The path for the iron horse has become already beaten by the hoofs in the service of the Overland Mail; stopping points and stations are established, and the question of the feasibility of the enterprise is no longer muted. The mind of the nation is fixed, and points in one direction. It needs but the carrying out of the Cincinnati Platform to settle at once and forever, the question of "right of transit" in times of peace, and the defence of our young and comparatively feeble though vigorous sisters in times of war. In fact, it would cost our government about the same amount to carry on with England and France a diplomatic defense of what is not our own nor theirs either to talk about, as it would to build the road so much needed upon our own soil, and about which there could be no dispute, and certainly infinitely less than it would to fight about it.

NEW POLICY OF THE SOUTHERN PACIFIC RAILROAD, AS INAUGURATED BY THE BOARD OF DIRECTORS, APRIL 10, 1859.

WHEREAS this Company was chartered by an act of the Legislature of the State of Texas, passed on the 16th day of February, 1852, under the name of the Texas Western Railroad Company, and the charter was, on the 16th day of August, 1856, modified and amended, whereby its name was changed to that of the Southern Pacific Company; and whereas many of the trusts and franchises therein granted have been exercised beyond the territorial limits of the State of Texas, in the exercise of which various contracts have been entered into without authority in law, as we are advised by the attorneys of the Company, to make the same legal and binding upon the Company, but the same were and are null and void for that reason, under the plain provisions of law, as follows, to wit:—

"A private corporation, whose charter has been granted by one State, can not hold meetings, pass votes, and exercise powers in any other State. It can have no legal existence out of the boundaries of the sovereignty by which it is created, must dwell in the place of its creation, and can not migrate to another sovereignty."—Angell & Ames on Cor., 6 Ed. p. 95. 13 Peters R. p. 519. 14 Peters R. p. 129. 1 Lou. R. p. 47. 14 Shepley Rep. p. 519.

"It by no means follows, however, that because a corporation may, by its corporate agents, general or special, act and contract without the limits of the State which created it, that the corporation itself may meet out of the limits of the State, and there create and authorize its agents. On the contrary, in a late case in Maine, it was expressly decided that such an extra-territorial meeting, unless authorized by the charter or general law, was absolutely void."—Angell & Ames on Cor. p. 313, 6th Ed.

And whereas many of these extra-territorial contracts have been made upon inadequate consideration; in others there has been a failure of consideration; and in others, still, there has been bad faith in the attempted execution; from all of which errors, defects in proceedings, and derelictions, this Company has been brought to the very verge of ruin, now, therefore,

Be it Resolved, That all such contracts are null and void, and the same be and are declared void and inoperative upon this Company, and held by it for naught.

And whereas many transactions, entered into beyond the limits of the State of Texas, and under authority emanating

from an attempted exercise of powers out of the said State, have been made in good faith, and the Company has derived substantial benefits therefrom, and should, in justice and propriety be recognized and legally adopted and rendered valid and binding upon it, and should be carried out by the Company as speedily as is practicable, now, therefore.

Be it further Resolved, That a Committee of **THREE** persons be appointed from the Directors or Stockholders, the President being a member thereof, who shall be clothed with full power to investigate, at any place in the United States, at such times as they may appoint, all contracts, obligations, and transactions of the Company, with all persons; and if, upon such investigation, said committee shall be satisfied that said contracts have been entered into in good faith, for beneficial objects to the Company, and have been faithfully executed without damage to the Company, then said Committee shall have, and are hereby invested with full power to approve and ratify the same; but if said committee should be satisfied that said contracts have not been faithfully executed and performed, or that the company has derived no benefit therefrom, then said committee may modify or compromise said contracts upon principles of justice and equity, or may totally reject and declare invalid the same, a majority thereof signing and rejecting the same; and said committee shall refer and report all they may do in pursuance hereof to the President of the company, who shall approve their acts so far as he may think the same wise and just and conducive to the best interests of the company; or otherwise he shall report the action of said committee to the Board of Directors for their approval or rejection; but if the President approve the action of the committee, he shall re-execute the said contracts, or modify the same, as may be agreed upon by the parties. The President shall fill vacancies in said committee from time to time, as the same may occur in any place in the United States, but in all cases which the President shall hold clearly right and proper, he has full power hereby conferred to settle and arrange the same without reference to any committee, and shall promptly report all acts to the Board.

And whereas many misrepresentations have been made to the public as to the sale and issues of the stock of this company, the quantity thereof, and the considerations paid therefor, and the good or bad faith of officers and agents of the company therein, which have been used by rival and hostile interests to the detriment of the company, operating upon the ignorance, prejudice, and credulity of many persons; and whereas these and other appliances have been made the more potent for evil, because of the many rumored errors, abuses of trusts by officers, agents, and employees of the company, bringing it upon the precipice of dissolution and ruin; and whereas by a timely foresight and well directed effort, these dire calamities have been averted through a compromise and settlement of the long continued difficulties and controversies between what is called for convenience the old and new companies; and whereas there has sprung out of such settlement a general feeling of confidence, of hope, and promise in the success of this great enterprise, and now pervading the public mind in the State of Texas, and thence emanating, must spread over the nation and the world, alike demanding the attention of capitalists and the best minds of the country, thereby inviting and securing the contributions of both; and whereas a duty now devolves upon this company to show that it intends to eschew the erroneous policy and bad management characterizing it heretofore, to boldly correct errors of administration, and to put off abuses of trusts, holding officers, agents, and employees to a strict accountability, for all things to them entrusted, thereby inaugurating a new era and a new policy in the history and affairs of the company, with direct reference to a rigid economy and the prompt payment of debts, and a rapid construction of the work:

And whereas the entire stock of the company is less than \$2,500,000, from surrenders and forfeitures of its capital, and the assets and property, after payment of debts, are believed to be worth more than \$1,250,000, without estimation or including the value of franchises and charter, worth millions of dollars; and whereas the capital stock, in issues of shares of one hundred dollars each, under the provisions of the charter, including all property real and personal, franchises, and right of property, is the sole and only representative of the rights and the property of the company, and whether the number of shares be great or small, the number can only represent, and is the synonym of the Company's wealth, and therefore it can make no difference to the owners thereof whether the capital stock be divided into one number or another of shares, so that each stockholder's relation to the wealth of the company is preserved, and therefore the diminution of shares of the capital stock one-half would make the one half afterwards worth as much as the whole number before the reduction, but producing the result of making the reduced stock equal to par, in cash, in the estimation and judgment of the Board of Directors, our largest stockholders, and of prudent and calculating minds both in and out of Texas; now, therefore,

Be it Resolved, That the capital stock of the company, now issued in certificates of stock be, and is hereby reduced one half in number. That is to say, to the sum not exceeding \$1,250,000, divided into two hundred and fifty thousand shares of one hundred dollars each share, in the hands of each and every holder or owner thereof, except as in another resolution, herewith passed, is provided.

And whereas many of the stockholders of the company have made, in the late exigencies, a loan of fifty cents per share, upon each share held by them, to aid and help the company to protect itself against the demands of creditors and of adverse claimants; and whereas others, who were not able to make the loan were invited, and they surrendered one half of their shares to the company as a donation; and whereas others have neither made the loan nor the surrender of stock, but have stood aloof, not willing to risk, but seemingly willing to accept the beneficial results of other stockholders' labor and money, which is unjust and improper, as a common burden for the protection of common rights and interests should be borne equally by all: now, therefore,

Be it Resolved, That each stockholder who has neither made the loan nor the surrender of stock, is hereby required to do the one or the other, and that the President and Secretary of this company are hereby prohibited from and instructed not to recognize, by a re-issue, any stock upon which there has not been loaned to the company fifty cents per share, or one half of the shares previously owned or held have not been surrendered to the company, as required by justice good faith and duty to fellow stockholders, now indispensable to the relief and security of the company and the advancement of the enterprise.

Be it further Resolved, That certificates shall re-issue to all claimants who have or shall make said loan or surrender as hereinafter provided for one half the stock and interest previously held by them, upon the delivery of certificates of stock respectively held, within the next ninety days.

Be it further Resolved, That in all cases where a surrender of the stock has been or shall be made, and the holder of the residue will loan fifty cents per share upon the whole number of shares previously held, certificates for said residue shall be issued to him or her; or if said holder should decline and refuse to make said loan upon said stock, then certificates shall only re-issue to said holder for the one-third of the stock held by him or her before such surrender. The general reduction of stock renders this further reduction of non-paying stockholders just and equitable.

Be it further Resolved, That in all cases where a holder of stock has and does decline to lend fifty cents per share, or to make the required surrender of his stock to the company, that certificates shall only be re-issued to such holder for one-third of the total number of shares held by him or her, and the public are especially cautioned and requested not to buy or operate in the stock of said company, not dated since the 6th of April, 1859.

Be it further Resolved, That no transfers of stock shall be made upon the books of the company or certificates therefor re-issue in any case where the holder or owner of such stock has and does refuse to comply with the terms and conditions of these resolutions, and the officers of the company shall resist, in every just and legal mode, all and every measure in violation of the policy herein adopted.

Be it Resolved, That the stockholders making the loan of fifty cents per share to the company, shall be permitted to receive the reduced stock of the company in payment of such loan at its par value of five dollars per share, and the officers of the company shall issue from the office at Marshall certificates for the same, upon the certificate of the collecting agent's receipt for the money so advanced.

Be it Resolved, That all interest upon stock shall be and is hereby suspended and withheld until the company shall construct and equip and operate at least one hundred miles of road.

Be it Resolved, That all surrendered and forfeited stock not disposed of by the President of the Company, shall be reduced one half in like manner as the stock held by individuals, which stock, so reduced, the President is hereby authorized and empowered to sell and dispose of, as he shall be able to do, most conducive to the relief and interest of the company, and in conformity to the views of stockholders and directors indicated at the Louisville meeting in November, 1858.

Whereas, under the present policy of the company, with the vast grants from Texas, and the almost certain aid of Congress, the stock issues, in amount, should be as small and restricted as possible, now, therefore,

Be it Resolved, That the issue and sale of five per cent stock shall be, and is hereby limited to an amount which shall not exceed the sum of three millions of dollars, at the par value thereof, paid and endorsed thereon, and shall never exceed this amount, unless three-fourths of the stock of the company concurring shall so direct, and at a meeting specially called for that object.

Resolved, That books shall be opened by such persons as the President shall appoint, in such towns, cities, and places in the State of Texas, for the purpose of selling the preferred stock of this company, which shall not exceed in amount the sum of five hundred thousand dollars, to be paid for in cash, work, materials, paper, on such terms as the President may think most expedient and most convenient to its citizens, and necessities and interests of the company; said books to be kept open for the space of ninety days.

And whereas it is deemed just to the stockholders and the creditors in this company to give them the preference in the purchase at the sale of the reduced stock herein directed to be sold, now, therefore,

Be it Resolved, That the stockholders and creditors of this company shall have the preferred right to purchase of this company the reduced stock authorized in these resolutions to be sold, for the period of ninety days from the 10th day of April, 1859, unless, in the judgment of the President, the security and interests of the company otherwise demand. This restriction is not made to embrace the five hundred thousand dollars of stock allotted to the citizens of Texas.

And whereas close economy should be observed in the affairs of this company, and all useless offices abolished, and all salaries reduced to the lowest price which will command the requisite energy, talents and capabilities for success, now, therefore,

Be it Resolved, That the officers of the company, and especially the Vice President, Treasurer, Secretary, and Superintendent, be united and blended in as few persons, with an annual salary of the smallest amount practicable. The salary of the President shall be \$5,000, with traveling expenses. The salary of the Vice President \$2,000 per annum. The salary of the Secretary and the Superintendent, shall be respectively, \$1,800 per annum. The salary of the Treasurer shall be \$800 per annum. The Secretary shall be allowed a clerk or clerks, whose salaries shall be fixed by the President and Directors, in accordance with the above standard of economy. The salary of Chief Engineer shall be \$2,000.

Whereas large issues of stock of the Atlantic and Pacific Railroad Company were given for the purchase of the char-

tered rights, stock subscriptions, &c., of sundry persons in Texas of the Texas Western Railroad Co.; and whereas by Resolution at Montgomery, Ala., in 1854, the same were directed to be exchanged for the stock of the Texas Western R. Co., which act is held illegal, null and void; and whereas subsequently, almost all of said parties agreed to receive the five per cent stock of this company in lieu of the full paid stock of the Atlantic and Pacific R. stock, at par; that is, one hundred dollars of five per cent stock of the one company for the full paid stock of the other. And whereas some have made said exchange, and some have not, and whereas the existence and success of the enterprise depend on freeing it of all uncertainties, and removing all impediments to progress.

Be it Resolved, That all parties who hold in good faith any part of the Atlantic and Pacific Railroad stock thus issued, be and are hereby permitted and requested to present the same to the office of the company, at Marshall, Texas, within the next sixty days, and receive therefor the five per cent stock in an equal amount for the full paid stock; standing upon the same grounds and subject to the same requirements as other stockholders of the company; that is for the reduction of one half the amount and the loan of fifty cents per share, &c.; and it is hereby declared, ordered, and decreed, that all who fail, neglect, or refuse to avail themselves of this overture of adjustment, shall be forever excluded from the benefits of the same.

AGREEMENT MADE BETWEEN THE NEW AND OLD SOUTHERN PACIFIC R. R. COMPANIES, APRIL 6, A. D. 1859.

WHEREAS, The Southern Pacific Railroad Company, represented by Jephtha Fowlkes as its President, and the Southern Pacific Railroad Company represented by L. P. Grant as its President, each claims to be the Southern Pacific Railroad Company, according to law, and to be entitled to the name, charter, franchises, and property of said Company.

AND WHEREAS, The said Companies and their members and stockholders have divers matters of litigation and controversy growing out of their said respective claims.

Now, with the view of amicably settling and terminating said litigation and controversy, the said Companies have agreed as follows:

First, The said contracting parties, for the purpose and objects of this agreement only—and in aid of the execution of the same hereby recognize the corporate name and being of each other, and for convenience of distinction and designation, the said Company represented by Jephtha Fowlkes, as President, shall be called the old Company, and the said Company represented by L. P. Grant, as President, shall be called the New Company.

Second, The New Company agrees to relinquish and transfer to the Old Company all their rights, title, and claim to the said Railroad, property, charter, and franchises, for the sum of three hundred and sixty-two thousand dollars, to be apportioned among the members and stockholders of the New Company, or their assignees, according to the schedule hereunto annexed, marked A; and in consideration of said relinquishment and transfer, the Old Company agrees to pay or satisfy said sum of money, in the time and manner herein provided. That is to say—

1. All judgments now outstanding against the Old Company to be at once paid off, or otherwise satisfied and discharged, and the amounts thereof, so paid, which are, or may be included in the above mentioned sum of three hundred and sixty-two thousand dollars to be deducted from said amount.

2. The sum of fifty thousand dollars by the expiration of thirty days from the final determination of the suit, of the State of Texas against the Southern Pacific Railroad Company, lately decided in favor of Defendants in the District Court of Harrison County, Texas, from which notice of appeal to the Supreme Court is given by the State.

3. Fifty thousand dollars, in ninety days from the final determination of said suit with interest on each of said sums at 8 per cent. per annum until paid; and

4. The balance of said sum of three hundred and sixty-two thousand dollars in one and two years, from the final determination of said suit, with interest at 8 per cent. per annum until paid.

Third, The New Company is to have and to hold the possession and the use and management of said Railroad, property, and franchises as they now have and hold the same until the payment or discharge of said judgments and of the said sums of fifty thousand dollars respectively as aforesaid, or until the payment of the said sums of fifty thousand dollars respectively is secured by means of a notarial paper, approved by the firm of Payne & Harrison, Commission Merchants of the City of New Orleans, and when the said sums of fifty thousand dollars, respectively, are paid or secured, as aforesaid, then the New Company are to relinquish and transfer to the Old Company all their right, title, and claim to the said railroad property, charter, and franchises, and the possession thereof, reserving a mortgage or deed of trust on the same, to be executed by the Old Company to secure the payment of the said balance of the three hundred and sixty-two thousand dollars.

Fourth, The Old Company binds itself to pay or discharge the judgments against the New Company, amounting to about twenty-three thousand dollars, by the expiration of four months from the date of these presents, and in the mean time and until said four months expires, the New Company is bound to control said judgments so as to protect said Railroad, property and franchises from being levied and sold to satisfy the same. The amount of said judgments paid as aforesaid to be considered parcel of and payments *pro tanto* of the said sum of fifty thousand dollars, first due.

Fifth. The suit entitled, the Southern Pacific Railroad Company vs. Jefferson M. Saunders, et als. No. 3701, pending in the District Court of Harrison county is to be dismissed by the plaintiffs upon the signing of this agreement.

Sixth. When any of the debts or claims in schedule A. hereunto annexed are paid, in whole or in part, by the Old Company as heretofore provided, and said debts or claims are represented by stock in the New Company, or for which the New Company has heretofore agreed to issue stock, the Old Company shall be subrogated to the ownership of said stock, *pro tanto*, with said payment, and shall be entitled to all the rights of the holders of said claims as creditors or otherwise, and to demand of the stockholders whose debts or claims are so paid, the transfer to the Old Company or such persons as it may appoint, on the books of the New Company of said stock *pro rata* with such payment, and upon final payment or satisfaction of said judgments and of said sums of fifty thousand dollars, respectively, as here inbefore provided, the New Company will deliver to the Old Company, its stock and office books and seal of office. It is further stipulated that until said Railroad property and franchises are delivered as aforesaid to the Old Company or persons appointed to receive the same as herein expressed. The stock to which the Old Company or its appointees are subrogated as aforesaid, shall not be represented in an meeting or vote of the stockholders or directors of the New Company.

Seventh. While the New Company continues in the possession of said Railroad, property and franchises, and until the same is delivered to the Old Company as aforesaid, the Old Company may have the privilege of proceeding to work upon and construct said Railroad, and to use the locomotive and cars thereupon to aid in said work and construction provided, that the exercise of said privilege shall not interfere with the use and control of said Railroad, property and franchises, by the New Company, and shall not be adverse to the title of the New Company and the use of said cars and locomotives by the Old Company shall be at its own expenses and costs.

Eighth. The Old Company binds itself to hold the New Company harmless of all debts, liens, or incumbrances against said Railroad, property, and franchises created by itself; and the New Company binds itself to hold the Old Company harmless of all debts, liens, and incumbrances against said Railroad, property and franchises created by it-self. The New Company also agrees to call back to its office all its stock which may have been put into the hands of any of the officers, or agents for sale, or if any shares thereof have been sold—then the New Company shall account for the proceeds thereof.

Ninth. While the New Company continues in the possession and control of said Railroad, property, and franchises, the Old Company may sell and convey any part of said property, *provided* that the property thus sold shall not be necessary to the construction, use, and enjoyment of said Railroad, property, and franchises by the New Company, and further provided, that any members or stockholders of the New Company may have the privilege of buying said property, at a price to be agreed; and further provided, that the proceeds of said sale shall be paid to the New Company for the benefit of the parties in said schedule named.

Tenth. If the Old Company shall, in any way, be dissolved, before the payment of one hundred thousand dollars in instalments as aforesaid, thereupon the payment thereof, according to the stipulations of this agreement by the corporators of said company or its authorized agents or otherwise, the stock of the New Company shall be transferred upon its stock books, and all the rights, title, and interest of the said Company to the said Railroad, property, charter, and franchises shall be relinquished and transferred by the said Company, to such person or persons as the last Board of Directors of the Old Company shall designate, subject to a mortgage or deed of trust, as aforesaid, to secure the said balance to the New Company; and the said person or persons so designated shall have the same right to demand the said transfer of stock from the corporators of the New Company, and the said relinquishment of said road, property, charter, and franchises, and the New Company shall have the same right to said mortgage or deed of trust as if the Old Company had not been dissolved; the object being to subrogate the corporators of the Old Company, upon the happening of the contingency above named, to the rights of the New Company, subject to the terms of this agreement, and to enable them to carry the same into full effect.

Eleventh. The New Company shall not make any further contracts for the construction of said Road pending this agreement, and as to the said suit of the State of Texas against the Southern Pacific Railroad Company, the New Company is to continue its present status as one of the defendants thereto.

Twelfth. The contracting parties hereto mutually declare and pledge themselves to each other, that this agreement is made in good faith and with the intent and purpose to carry its stipulations into full effect, and that in good faith, the same shall be observed and executed, according to its reasonable construction and meaning; should it be necessary, in order to give full effect to this agreement, that any further agreement, supplementary hereto should be made, then the said parties will, by mutual consent, enter into the same, and, finally, the preservation of the rights of the parties, the construction of said Railroad and the promotion of the public as well as the private interest involved in this enterprise have induced us to harmonize our differences and will continue to actuate us in future.

Thirteenth. All items or parts of items embraced in schedule A., which may have been paid by or for the Old Company shall be credited on the gross indebtedness herein stated, and stock shall be allowed upon the same.

In witness, whereof, on the part of the Old Company, this agreement is signed by Jephtha Fowlkes, President, and

countersigned by D. C. Wilder, Secretary, with the seal of said Company affixed, in pursuance of a legal vote of the Board of Directors of said Company.

And, on the part of the New Company, this agreement is signed by W. T. Scott, Vice President, (acting as President in the absence of L. P. Grant, President,) and countersigned by W. R. D. Ward, Secretary, with the seal of said Company affixed, in pursuance of a legal vote of the Board of Directors of said Company.

[SEAL.] JEPHTHA FOWLKES, President.
Countersigned,
D. C. WILDER, Secretary.
[SEAL.] W. T. SCOTT, Vice President.
Countersigned,
W. R. D. WARD, Secretary.

RAILROAD DEPRECIATION.

The great loss which the builders of railroads have sustained in the last few years has no doubt been the cause of much distress in many quarters, but the community has suffered no loss. On the other hand, the country at large has been a great gainer by the construction of the works. They have added vastly to the general development of wealth. Large tracts of land have been made available to the cultivator, and the wealth he has extracted from them has been poured over the railroads into the general markets. Mines, tanneries, etc., etc., have all been developed by the aid of railroads. The finances of the Federal Government afford an instance of their utility. The Government held in Illinois 11,000,000 acres of land, which had been on the market from fifteen to thirty-five years without finding buyers, because the lands were inaccessible to market. It gave 2,700,000 acres to Illinois to build the Central Railroad, and within five years it sold the whole of the remainder, 8,300,000 acres, for over \$9,000,000 cash, mostly to settlers who cultivate the surface, send the produce to market, and pay \$72,000 per annum taxes to the State of Illinois on those lands. This has been the direct benefit of that road to the Government, the State, and to settlers, yet the stock sells at 66 per cent., a rate which gives a loss to the holders. The same is the case with most other railroads in the country. They have all been built upon a wrong principle, and been used as swindling machines. They are not widely different in their nature from common roads, which are indispensable for the traffic of the country, and are kept in repair by the taxed labor of farmers, through and by whose lands they run. No one ever attempted to make them a source of revenue, but they are understood to be an indispensable cause of annual tax. These were improved upon at times by the construction of turnpikes, by companies authorized to collect a very small tax from each passenger for a certain time. The next improvement was plank-roads, and railroads succeeded, but instead of building them upon the same principle as governed the construction of ordinary roads, they have been made objects of luxury. The highest comfort and luxurious ease of wealthy travelers have been sought to be obtained at small cost, and to have the expense defrayed by the ordinary business of the country, such as belonged to ordinary roads. For these ends, one thousand millions of dollars have been spent in this country upon railroads which can not pay the interest upon half the money. The ordinary roads of a country cost each farmer a certain annual tax of say \$20 per head in money and labor; for that he can transport his produce and himself in vehicles to market. The railroads offer a speedier and better means of conveyance, but owing to the costly structure, the charge for freight and passage over the cost of the ordinary roads exceeds the superiority of its advantages, which indeed are greatly modified to the farmer living near a

city, by the competing produce it brings into the market from a distance. The result is, that a large portion of the money put into roads is lost. The depreciation on the Erie Railroad is an instance. That road is 594 miles, and its cost and present value, according to the quotations to-day, are as follows:

	Price.	
Capital.....	\$11,000,000	74
1st mort. .7 per ct., due 1868..	3,000,000	91
2d " .7 " " 1859..	4,000,000	81
3d " .7 " " 1863..	6,000,000	65
4th " .7 " " 1860..	2,057,593	46
Sinking..7 " " 1875..	3,949,000	23
Cover'tle..7 " " 1871..	3,754,000	22
" .7 " " 1862..	3,125,000	22½
Total.....	\$36,885,000	14,289,754
Floating debt.....	2,000,000	

The actual loss is \$22,595,246, or 61 per cent. of the investment at the present rates, and these are not likely to be the lowest, since even the interest on the first mortgage bonds is overdue and unpaid. The road itself is in a better condition than probably for years previous, but its means have been exhausted in that atrocious humbug and individual speculation, the "Long Dock," which is to give the road all the business in the world—when it can get it. The great difficulties of the road began with a "strike" in the Fall of 1856, and a "strike" more sweeping and disastrous is now impending on the whole line. A large number of the employees are short of their pay, and the managers of the Central Road have it in their power at any moment to "fire the train," by providing for the ringleaders. If the Erie Railroad bondholders are compelled to foreclose, and the stockholders use their right of redemption, the actual cost to the new proprietors may be cut down to the present market value, that is to say, about \$14,000,000, at which rate the road would be certain to ruin the New York Central, since it could carry freights and passengers lower than that road could, hence it is to the last degree absurd on the part of the Central to push the Erie too close, unless the Central Road managers should turn out to be themselves the urgent creditors of the Erie. The fact is that new lines opening by local aid are so sub-dividing the business, that the roads can not pay old cost. The roads which traverse the peninsular of Michigan depended upon the through traffic, which has fallen to a very low figure. The local trade declines as fast as the through in those regions, and the fact must soon force itself upon all interested that roads have been built upon a too expensive principle to pay.—U. S. Economist.

ILLINOIS SOUTHERN RAILROAD.

From reliable information derived from Hon. S. H. Martin, President, and the Engineering corps, we are gratified to be able to give cheering words to the friends of this road. Capt. Martin has just returned from a trip to Lawrence county, where he, in company with the Secretary, and other officers of the company, have been spending a few days in ascertaining the feelings and wishes of those who are or should be interested in the speedy completion of an enterprise, which will mark an important era in the welfare of Southern Illinois.

They found the good citizens of Lawrence county, and of Lawrenceville thoroughly aroused to their interests, and ready for action. From a preliminary survey, commencing about three and a half miles above Mount Carmel, on the line surveyed to Vincennes, and diverging a little west, it was found that nearly an air line from thence to Lawrenceville could be obtained on good ground, and making the route about three miles shorter.

Should this line be finally adopted, the Illinois Southern Railroad, would intersect or rather unite with the Wabash Valley Railroad now in progress, and thus form the most complete line of connections, North, East or West, of any road in the whole west. Commencing at Lawrenceville, the Wabash Valley Road runs through the upper part of Lawrence county; thence through Crawford, Clarke, Edgar, and Vermillion; so that the traveler from Grayville could connect with the Ohio and Miss. Road at Lawrenceville, only eight miles west of Vincennes; next with the Terre Haute and Alton Road at Paris, about eighteen or twenty miles from Terre Haute, and at Danville with Lafayette and Toledo, or Great Western Road, not far from Lafayette.

It will be seen by reference to the map of Illinois, that this arrangement, will give to our road every facility that could be wished for, while let its southern terminus be located either at Cairo, Mound City, or Paducah, a nearly strait line of travel from North to South is at once attained.

All of the countries through which the two roads are being constructed, are unsurpassed for agricultural facilities, being composed of the richest soils, and in many portions underlaid with mineral wealth almost fabulous, as the geological survey of this heretofore neglected portion of our Giant State has fully demonstrated.

Another important road is contemplated, and a liberal charter obtained from our Legislature from Mattoon to Grayville. The completion of the Illinois Southern, and the Wabash Valley Railroads, will make the Grayville and Mattoon Road a necessity. This latter road, commencing at Mattoon, on the Illinois Central, would run through the fertile and prosperous counties of Coles, Cumberland, Jasper, Richland and Edwards.

These roads built, would place Southern Illinois on equal footing with her more favored neighbors of the North—more favored, only because while we have been idly loitering away our time in supineness and inactivity, they have with commendable zeal and energy constructed plentiful means of communication with all the plentiful marts of the United States; and while our immense agricultural products were rotting in ware-houses, waiting for the Wabash and kindred streams to get damp enough to float a Broadhorn, were sending their produce with lightning speed to the early markets and quickly receiving rich returns; in the mean time we,—perforce have had to wait until last in market, we were obliged to take what we could get, and thank God for small favors sparsely bestowed.

But a brighter day is dawning, and ere long we will show the world that the term "Egypt," so reproachfully applied heretofore to one of the richest sections of country on the globe, will have a very different significance.—*Grayville Independent.*

CITY RAILROADS.

While city railroads were as yet a new thing, and citizens who now ride on them regularly every day were vowing that they would never get into them; while it was being proved beyond all doubt that they were going to ruin all real estate, and make the town unendurable, there was one argument which came in as a minor refrain to every verse—that they would ruin the streets for other vehicles save cars. This there was no getting over. The poor vehicles, the unfortunate drays, the miserable carriages!

If any body will look at the long strings of

vehicles of every description which may be seen rolling along in the track of any city railway; if he will study the saving of horse-flesh and the remarkable ease with which wheels of all kinds roll over the grooves, he will find some difficulty in understanding where the prophesied drawback exists. Then, at the side of the track is plenty of old-fashioned cobble stone road; but the railroad is better.

In New York the railroads are recognized as being so convenient, that a certain kind of light wagon—much used there—is built expressly with reference to railroad gauge. Nothing is commoner than to see cars making fast time over the iron, and turning off quickly as trains come along. In fact, it may be said that none of the objections originally urged against the roads, have proved valid. The enormous increase in the amount of travel from one part of the entire city to another answers every thing. Of all material elements of progressive prosperity, there is none like easy transit. It raises the value of property, stimulates business and encourages settlement in regions which must otherwise have long remained neglected. We are very much mistaken if those who prophesied that the makers and drivers of horse vehicles would be injured by the city railroads do not find, on the contrary, that they have had their business greatly improved by the innovation.—*Philadelphia Bulletin.*

PACIFIC RAILROAD.

Speech of the Hon. Jefferson Davis, of Mississippi, on the Pacific Railroad Bill, delivered in the Senate of the United States, January, 1859.

MR. DAVIS. I now ask the Senate to consider the proposition which was sometime since submitted by me. It is to strike out all after the enacting clause of the bill, and insert a substitute.

The substitute is as follows:

That the President of the United States be, and is hereby, authorized and directed to advertise for proposals to establish railroad communication across the territory of the United States, and thus to connect the States of the Atlantic and the Pacific, and to contract for the transportation, upon said railroad, of the United States mails, troops, seamen, munitions of war, supplies for the Army, and Navy, and all other Government service.

SEC. 2. *And be it further enacted*, That the party contracting to establish said railroad communication, shall be required to construct the railroad in a substantial and workmanlike manner, equal in all respects to railroads of the first class, with all the necessary drains, culverts, bridges, viaducts, crossings, turnouts, stations and watering places, and all other appurtenances, including the equipment and rolling stock. And the said railroad, with all its appurtenances and equipment, shall be finished and put into complete operation within the period of ten years from the execution of the contract.

SEC. 3. *And be it further enacted*, That, to aid in the construction of said road, there shall be, and is hereby, appropriated and set apart the alternate sections of public land, for the space of six miles on each side of said road, to be held and conveyed as herein provided. The alternate sections hereby appropriated shall be those designated in the public surveys by odd numbers; and the contracting party receiving land under the provisions of this act shall be required to sell, and unconditionally convey, one half of the same within five years from and after the issuing of the patents for the same, and the remaining half within ten years from the issuing of the patents; and all said lands not so alienated shall revert to and become the property of the United States.

SEC. 4. *And be it further enacted*, That the party with whom the contract aforesaid may be made shall proceed without delay to locate the general route of said road, and furnish a detailed survey and map thereof to the President, who shall cause the public lands, to the extent of forty miles on each side of the said road, to be surveyed, and the Indian title thereto to be extinguished as soon as practicable; and the provisions of the act of September, 1841, granting pre-emption rights, and the acts amendatory thereof, shall be, and the same are hereby, extended to the lands thus surveyed excepting those herein set apart and appropriated for the use of the said road.

SEC. 5. *And be it further enacted*, That in making said contract, it shall be stipulated that the said road be divided into sections of twenty-five miles each, and that none of said lands are to be conveyed to the contracting party until one section is completed and put into successful opera-

tion, when the President shall convey by patent to the contracting party, three-fourths of the land pertaining to the section so completed, retaining the other fourth as security for the completion of the next section of twenty-five miles; and when the next is completed, the President shall, in like manner convey to the contracting party three-fourths of the land pertaining to that section, together with the reserved one-fourth on the previous section; and so on with each succeeding section, conveying three-fourths and retaining one-fourth as security for the completion of the next until the last section of the road is finished and put into operation, when the President shall convey to the contracting party the residue of the lands hereby appropriated.

SEC. 6. *And be it further enacted*, That the land of the United States, for two hundred feet in width, along the entire line of said road, is hereby set apart and dedicated for railroad and such other purposes, not incompatible with this grant, as Congress may authorize and direct; and the party contracting for said road may take any earth, stone, timber, or other necessary materials, for construction and keeping in repair of the road, within the said two hundred feet, subject to such regulations as Congress may provide.

SEC. 7. *And be it further enacted*, That the contracting party, for, as owners of, said road, may at any time construct one or more additional tracks within the two hundred feet set apart for the right of way; and it shall be the duty of said contracting party, or owners of said road, to permit any other railroad, which shall be authorized to be built by the Legislature of any Territory or State, in which the same may be situated, to form connections with it on fair and equal terms.

SEC. 8. *And be it further enacted*, That the President be, and he is hereby, authorized to enter into contracts for the transportation, under the direction of the proper Departments, on the said road, when completed, and for any available part thereof while said road is in course of construction for the period of twenty years, of the United States mails, and all military and naval supplies, troops, seamen, passengers, and freights of all kinds, for Government purposes, with the limitation that the price to be paid shall not exceed that which the Government would necessarily pay by any existing means of transportation, nor in time of war be higher than the rates stipulated for in time of peace.

SEC. 9. *And be it further enacted*, That in any case where the passengers and freight shall be greater than the transporting capacity of the road, the Government shall have priority of right for all purposes of transportation.

SEC. 10. *And be it further enacted*, That, for and in consideration of the advantages thus to be secured to the United States in the use of said road, and further to aid in the construction of said road, \$10,000,000 are hereby appropriated, to be advanced upon the following conditions and provisions, to wit: As a guarantee of the faithful performance of the contract hereinbefore described, the contracting party shall deposit with the Secretary of the Treasury the sum of \$500,000, in bonds or certificates of stock of the United States, which may be subsequently withdrawn, in sums of \$10,000, as the work progresses, on production of vouchers showing to the satisfaction of the Secretary of the Treasury, that an amount equal thereto has been expended in the construction of said road. When one twentieth part of the line of said road, located as hereinbefore described, is completed and put in successful operation, the President shall cause to be advanced to the contracting party one twentieth part, less ten per centum, of the whole sum of money herein appropriated. And, in like manner, when each succeeding section of equal extent is completed and put in successful operation, an equal amount may be advanced to the contracting party, until the whole road is completed, when the ten per centum reserved shall be advanced to the contracting party, as hereinbefore provided.

SEC. 11. *And be it further enacted*, That until the sum of money thus advanced to aid in the construction of the road shall have been paid to the United States, no dividends shall be declared to the stockholders of said road, nor other sum be retained by the contracting party than that which may be necessary for the maintenance and successful operation of the road.

SEC. 12. *And be it further enacted*, That until the said contracting party or owners shall have fully reimbursed the United States for the advance of money herein authorized to be made, they shall keep books in which shall be entered regular statement of all disbursements, expenditures, and receipts, setting forth specifically the objects of said expenditures, and the sources whence said receipts are derived, together with a particular account of all accidents that may occur affecting property or persons, or causing delays upon the road; which books shall be open at all times to the inspection of the President of the United States, or any person authorized by him to examine the same, and to the members of each House of Congress; and the contracting party or owners shall make a report thereof annually to the President of the United States, on the 1st day of October in each year, accompanied by a minute and detailed exhibit of the expenditures and profits of said road for the year preceding, to be attested by the oaths of their Secretary and Treasurer; which report shall be transmitted to Congress at the commencement of each session.

SEC. 13. *And be it further enacted*, That should said contracting party neglect, refuse, or in any fail, to prosecute the work undertaken by them in a manner to secure the completion thereof in compliance with the contract, then all rights of said contracting party to the said road, right of way, lands, or other property pertaining thereto, including such amount of the sums of money advanced, if any, that may remain unexpended, shall be and become forfeited, and the United States may enter upon and retain the same. In the event of such forfeiture, to be determined by the President of the United States, he shall proceed to re-let that portion of the road remaining uncompleted under such forfeited contract, and provide for the disposition of the work in such a manner as will secure the earliest completion of the road in conformity with the provisions of this act: *Provided*, That he shall not stipulate, on the part of the United States, for any higher or other terms than are authorized and provided for in this act.

Sec. 14. *And be it further enacted*, That the proposals for establishing the railroad communication, and performing the service hereinafter described, shall be opened by the President of the United States after due notice, in the presence of the Cabinet and such persons as may choose to attend; and he is hereby authorized and directed to enter into contracts for establishing the railroad communication, and for the transportation provided for in this act, with the party whose proposal shall be by him deemed most advantageous to the United States, for the full and complete performance of said contracts, in compliance with the provisions of this act. All questions of damages and forfeitures by reason of any breach of said contracts shall be determined by the express terms and conditions of the same: *Provided*, That this act shall be taken and considered as part of any contract that may be made in accordance with its provisions, in like manner as if the same was set forth in said contract.

Mr. SEWARD. Will the honorable Senator from Mississippi be good enough to state the general effect of his amendment?

Mr. DAVIS. The general effect of the amendment will be to appropriate \$10,000,000 and ten sections per mile of land, to construct a railroad across the territory lying between the States of the Atlantic and the Pacific, leaving parties who propose to construct the road to name whatever location they please, and submit their proposals to the President. The other conditions, as to transportation, are like those of the bill. In relation to the receipts of the road, however, there is this difference: that, instead of requiring the proceeds of the road to be paid into the Treasury to remunerate the Government for its advances, this requires only the net proceeds to be paid in, so as to prevent the hazard of the failure of the company for the want of income to meet current expenses; and, to secure the Government from having the road forfeited and thrown upon its hands. The \$10,000,000 in this case, the sum proposed in the bill as amended, is to be refunded to the Government by the net proceeds to be paid into the Treasury, and in the form of advantages secured for the transportation of the Government.

There are other differences between the two propositions; the substitute enters not the limits of a State. It does not assume to give authority to any company, or to create any company for the construction of a road within the limits of a State. It has no termini indicated; leaving it to free inquiry as to where a road, with a given sum of money, can be built, that given sum having been determined by the belief I entertain that it would build a road at one point across the territory. I leave others to determine whether it would build it elsewhere.

Being satisfied that there is one line on which a road can be built with this grant, I say it is not proper to give one dollar more. We are here as agents; agents of the people to whom this money belongs. Is there a Senator who would add to the amount for which he could have a work performed, in order that he might induce some one to perform it elsewhere than the particular place which was found to be most practicable and economical? It is to be remembered that we have no right to be liberal; we have no right to appropriate money for the benefit either of individuals or of sections. We are restricted to the appropriation of money to answer the ends of the Government; and if a given sum will attain the service which the Government requires, we are in honesty bound not to appropriate more.

Now let us see how the \$10,000,000, the sum limited, is to be advanced. Only upon the execution of a certain part of the work; then it is to be advanced *pro rata*, retaining ten per cent. as security for the further prosecution of the work; and this on the line to which I have particularly directed my examination, has the additional assurance that every mile which is built increases the necessity for building the remainder; it is made the

interest of the contractor to go on, not merely by the reserved fund, but by the character of the country through which he is to pass. He begins at the western end to connect as soon as he can with the Rio Grande, and he begins at the eastern end as soon as he can to get to the navigable waters of the Pacific ocean.

The first question, it strikes me, which meets us in the consideration of this subject, is the necessity for a railroad across the continent. If there be no necessity for the railroad for Government purposes; if it be merely to facilitate migration across the continent, to encourage settlement along the line of the road, without contributing to the ends for which the Government was instituted, without enabling it to perform the duty which was imposed upon it; without, I say, being necessary to the execution of its duty, then I hold there is no constitutional power to build it. Therefore, in the front ground with me, stands the question, is the road necessary? I hold it to be essential in time of peace; essential for that intercourse which alone can hold the different parts of our wide-expanded Republic together. Separated as we are by an intermediate desert, fronting as we do upon different oceans, looking out to the teeming population of Asia on one side, and the active people of Europe upon the other, it must ensue, whenever our Pacific possessions are peopled, that they will have different interests; they will have an opposite commerce; and if they are required to come through a foreign country, to look over impassable mountains, to learn here by what laws they shall be governed; if our commerce is to continue as separate, as opposite, as it will be unless these two parts are more nearly linked together, the finger of destiny points inevitably to a separation of these two parts of the United States.

In the history of man, and history is said to be philosophy teaching by example, we find no instance where a country has maintained the integrity of its territory if that territory is riven by a chain of mountains. We find the warlike and semi-barbarous hordes of Asia running over the south of Europe; at one time a single military hero covering all the vast plains which lay beneath him; but soon we find those conquering legions separating from the people from whom they emanated, and in a short time the States they had conquered again assuming the geographical limits they had before the invasion. And so, at a more modern period, Napoleon led victorious armies over the Alps and over the Pyrennees; but those barriers which the hand of nature had placed again demanded the separation of the country into its original parts; and soon after the conquest we find France again reduced to the plains lying between those mountain ridges, and there to-day she stands as before her imperial conquests.

Thus inevitably do we reach the conclusion that mountains divide a people. But we are not divided merely by a mountain ridge, along each base of which, and up the slopes of which, a teeming population may hereafter live; we are separated by a system of mountains with desert plains, where, save here and there some irrigable spot, agricultural man can never reside. Then the question presents itself, shall we share the fate which history, by the example of all nations which have preceded us, indicates as our future, or so change the conditions of the problem as to obtain the opposite result? Shall we allow our territory to be divided? Shall the United States commence her downward step by losing the rich possessions she now holds on the Pacific, as the inevitable consequence of that separation

which mountains and deserts demand? Or shall we use the power which science and art, and the progress of civilization have conferred upon man, overcome the physical obstacle, bind these two parts together, and hold this country one and indivisible? These are questions which, I think, it belongs to the statesman to consider.

For such reasons it is held that the road is essential in time of peace. I believe it to be absolutely necessary in time of war, and hence within the constitutional power of the General Government. Upon this point it has been my misfortune to separate from those with whom I generally act, and who represent the same geographical section with myself. I believe, however, that I stand upon the unchanging rock of truth. I believe I advocate the true and permanent interests of the country, and impelled by the high duty devolved upon me, though assailed by my friends on the one side, and by my old political opponents on the other, I trust I shall stand unmoved. What, sir, are the arguments so constantly directed against the military necessity of this road? It is said that the period is rapidly arriving when the population on the shores of the Pacific can defend itself; that the ocean and isthmus routes now afford the means of transporting by sea what we propose to transport by land. Unless the people shall develop an agricultural capacity not yet believed to exist there, unless they shall be drawn into a different pursuit, and, instead of being tributary to the wealth of the Atlantic slope and the Mississippi valley by consuming the products of agriculture, shall become an agricultural people themselves, the day can never arrive when they will maintain from their own agricultural resources the population which will be necessary to defend that coast. Take the most remote period to which the eye of prophecy may look, and still we find staring us in the face the necessity that they must draw their supplies from the valley of the Mississippi.

But how are these supplies to be transported? In time of peace, I grant, the isthmus and ocean routes are open to us; but is there a Senator here whose intelligence will permit him to say that, if we were engaged in a war with a maritime Power, those routes would remain so unless we constructed a navy to sweep the seas? Is it not known to every one that the smallest character of war vessel lying sheltered in some port, would bide her time, cut off our transports, and it would only be in fleets covered by armed vessels of the United States, sufficient to protect them, that there would be the least safety in sailing down the coast. I grant that it is in the power of the American people to construct a navy to command the ocean down to the cape, and up the ocean beyond the possessions of the United States; but this would cost millions, where thousands would suffice with a more economical mode of transportation. Are we ready, through the long years of peace, to maintain a navy of such a size as this? Are we ready to invest the whole Treasury of the Government in vessels as perishable as those which in a nautical view it is proper to construct? Or shall we employ but a small part of that money in achieving for ourselves the whole end which this vast navy would attain? Sir, under any condition which we can anticipate, those routes could not be kept open in time of war. At the commencement of a war, we should be without lines of communication; our Pacific coast, with its sparse population, with its inferior agricultural resources, would be thrown upon its own capacities for defense, and be lost to the United States. When Rome

commenced losing her territory, decline was set upon her brow, and she rapidly sank into that decadence from which she never rose again. Whenever the United States begin to lose their territory, whenever an invading army can seize upon any portion of our domain and hold it, the prestige, the pride, the power, and the progress of the United States are at an end. Thenceforward the hand of decay will be laid upon us, and we shall sink, the unworthy defenders of the glorious institutions we have inherited.

But we are told that it is quite easy to store, on the coast of the Pacific, all the supplies which will be required for twenty-five years to come. Is it so? Have Senators studied the difficulty of preserving powder for twenty-five years? Do they know the impossibility of telling of what material gunpowder is made, unless it is inspected before manufacture and followed through the mill? Have they marked the amount annually condemned and thrown away because of the impurities contained in the salts from which it is manufactured? Have they kept an account of the deterioration of provisions? Have they forgotten the vast improvements made within twenty-five years, not only in ammunition, but in the weapons themselves? What, I would ask the Senate, would be our condition to-day, if pork and flour, reduced to the condition it would be after twenty-five years' storage on the damp coast of the Pacific; if powder, in the condition it would be in if it were kept twenty-five years, and originally made of imperfect material; if arms of the old standard of twenty-five years back, were our whole reliance for the defense of our possessions on the Pacific? This is the condition in which the country will be placed, unless it be claimed that we have reached that exalted wisdom which secures us from all errors of the present to be developed by the future.

Again upon those routes proposed to be traversed by sea and by short land connection, we pass into tropical climates. So far as I am informed, we have thus far found but one kind of flour which can thus be transported and delivered in good order. It is not so bad with other supplies; but something of the same kind appertains to all the supplies required for the Army and Navy on the Pacific coast. It is needless, therefore, to speak of the accumulation of vast stores, which are to serve us in future contingencies; but if that could be done, it would be easy to prove that the cost of accumulating and maintaining these stores would exceed the cost of constructing the railroad proposed.

We have been told in this debate, that, having stored our supplies in time of peace—supplies which will not deteriorate for a quarter of a century—it will be easy when war breaks out to march men across the continent. If Senators have acquired some knowledge by which the munitions of war and supplies for men are to be preserved indefinitely; if they have fixed the standard of arms so that no future change will be required, then, perhaps, they have also acquired the power to smooth down mountains; and fill up the cañons which nature has made, and to march men across places, where, when the last explorers were there, a route feasible for such use could not be found. It may not be generally known to the Senate, and I call their attention to the fact, that there are, to-day, across this continent, within the limits of the United States, but two roads practicable for wagons. I have had occasion, in another position, to call the attention of Congress to the fact, that the want of permanent supplies upon those routes

renders it impracticable to pass large trains in rapid succession; that the grass at the watering places, the only means of sustaining the draught animals, being soon exhausted, the communications overland must cease. These men are not to be marched across the continent, I suppose, without provisions. They are not to take a march of over an hundred days on what they can put in their knapsacks. I take it for granted, therefore, that Senators have discovered some manner of furnishing forage to these trains, when the natural supply has failed.

It has been asked, why build a road from the Mississippi Valley to California by Government aid, and leave all other railroads to be constructed by private capital? On more occasions than one, I have stated that the necessity of the case arose from the intermediate desert, which obstructed the construction of roads and caused the want of that continuous population which makes migration easy. I have said from the beginning, so far as I have been connected with this question, and others have said it much more forcibly, that the hand of nature had impressed upon it difficulties which could only be overcome by Government aid. I have looked upon it as really evading the question, as shrinking from the responsibility imposed upon us, when gentlemen have said "why not build this railroad as railroads are built elsewhere," presuming that their intelligence made them perfectly aware, that the means which had rendered it feasible to build them elsewhere did not here exist.

But, sir, there are other relations. War is not conducted merely by assembling men, and furnishing munitions and provisions. That which is termed the sinews of war—the ability of the country to raise the means of supply—lies behind all the military power of a Government. Now, I submit to any one, whether, if the shipments of gold from California and the Pacific coast were arrested for sixty days, there would be a banking institution in the United States which would not be necessarily closed? whether credit and commerce would not be paralyzed? whether the capacity of the Government to raise the means, by which it could maintain its Army would not fall with the prostration of private prosperity? If continued communication, by which we constantly derive the precious metals from that region of their great deposit, is essential even in time of peace to maintain, for sixty days, the prosperous condition of our country, how are we to bear, with most injurious results, the heavy burdens entailed by the prosecution of protracted and formidable war?

To all these arguments it may be answered, that granting them to be true in some degree, still, the vast expenditure entailed is a reason why we should not attempt this work; and in order to heighten the argument, gentlemen announce that it is to cost two or three hundred million dollars. The original bill, I think, proposes \$35,000,000. The substitute which I offer proposes \$10,000,000. Then the gentlemen must derive those two or three hundred millions of expenditure from the same source on which they have so largely drawn for their topography—their imagination—and the opinions must follow in the train of their own desire. Ten million dollars is the sum proposed in the substitute; \$35,000,000 in the bill. If gentlemen insist upon building three roads instead of one, and thus increasing the cost to an untold extent, let it be distinctly understood that the vast expenditure results from choice and not from necessity. For myself, mingling always with the idea I have of the necessity of the work, the idea of limiting

what is to be done under that necessity, to just so much as will perform that work, I have offered this substitute, believing it will execute all which is demanded by the necessities of the Government. I believe it will give us railroad connections to the Gulf of California, and in time to the Bay of San Francisco. I will speak of that, however, hereafter. So much for the argument of vast expenditures.

Before proceeding to the general discussion, I ask Senators to measure by facts of recent occurrence, the comparative advantage and cost of the work on the basis which I propose. In time of national peace to put down a rebellion that extended merely to the attacks of foraging parties upon our trains, it has cost us nearly as much to transport the food for the little army sent over to reduce the Mormons to order, as I propose to contribute to the building of this road. If this road had been built, it would not have been necessary to have made that expedition across the country, if, indeed, it could have been possible that the Mormons would have taken the attitude of rebellion at all. South of where the Mormons reside, and near to the line of this road, there are Indians, who, for their warlike character, and their numbers, are probably more than equal to all the Mormon population; and it is, perhaps, not unreasonable to anticipate another campaign, where the roads would be more difficult to pass, another campaign where the cost of transportation would exceed that of quelling the Mormon rebellion. In the time of war, it is provided in this substitute, that the cost of transportation on this road shall not exceed that which is paid on existing routes in time of peace. Thus we get the advantage of a uniform standard, paying no more in war than we now pay in peace upon any of the existing lines of transportation.

(TO BE CONTINUED.)

BALTIMORE AND OHIO RAILROAD.

DIRECTORS' MEETING.

The monthly meeting of the Directors of the Baltimore and Ohio Railroad was held yesterday. The revenue of the road for the month of April was reported as follows:

MAIN STEM.

Passengers.....	\$56,097 24
Express.....	3,776 00
Mails.....	9,685 33
Tonnage.....	241,419 34
	\$310,371 81

WASHINGTON BRANCH.

Passengers.....	\$25,449 07
Express.....	1,306 00
Mails.....	1,000 00
Tonnage.....	6,261 74
	34,110 81

NORTHWESTERN VIRGINIA.

Passengers.....	\$4,116 23
Express.....	866 67
Mails.....	19,601 81
Tonnage.....	
	24,584 71

Total.....**\$369,067 33**

Compared with the same month of last year, the following result is shown:

	Main Stem.	N. W. Va.	Wash. B'n.
April, 1858.....	\$411,546 59	\$33,352 57	\$38,059 29
" 1859.....	310,371 81	24,584 71	34,110 81
Total decrease for April, 1859.....			\$114,491 12

It will be seen that the revenue of the road has fallen off, as compared with April, 1858, in all its departments, the aggregate decrease being \$114,491 12. The heaviest decrease is in the tonnage on the main stem, which in April, 1858, amounted to \$348,063 45, against \$254,274 47 for April, 1859. This has been

caused partly by the small amount of freight now arriving from the west, but mainly by the suicidal competition between the four great Atlantic lines, which has so greatly reduced the rates of transportation. Compared with the previous month of March, the revenue of the road shows a decrease of \$40,993 69.

The financial year of the Company commenced with October. The receipts of the first six months of the present year compare with those of the previous year as follows:

	1858.	1857.
October.....	\$392,503 02	\$396,191 85
November.....	383,159 22	361,443 38
December.....	336,861 01	379,259 02
1859.		1858.
January.....	327,176 63	317,513 73
February.....	321,391 10	277,044 49
March.....	410,061 21	439,061 62
April.....	369,066 33	483,558 45
	\$2,540,219 52	\$2,567,071 94
	2,657,071 94	

Decrease present year....\$116,852 42

The transportation Eastwardly, into the city of Baltimore, during the month, in some of the principal staples has been as follows:

Bark, 118 tons; coal, 23,563 tons; fire brick, 121½ tons; flour, 50,581 bbls.; grain, 21,250 tons; granite, 441 tons; iron, 372 tons; iron ore and manganese, 1,220 tons; lard and butter, 589 tons; leather, 237 tons; cotton, 1,288 bales; wool, 88 bales; soap stone, 111 tons; lard oil, 142 tons; lumber, 3,037 tons; copper ore, 14 tons; lime, 44 tons.

Live stock, viz: Hogs, 8,722; sheep, 3,487; horses and mules, 26; horned cattle, 638; meal and shorts, 299 tons; pork and bacon, 3,451 tons; tobacco, 3,670 hhd; whisky, 9,001 bbls; miscellaneous, 928 tons; hay, 25 tons; hemp, 66 tons; flour from Washington Branch, 96 bbls.

During the meeting of the Board the committee of finance presented their report.—Among the items embraced in this document was a resolution adverse to restoring the pay of baggage masters to \$45 per month. They now receive \$40.

Dr. Ohr offered as a substitute that the pay be fixed at \$45, to commence from the 1st inst. This was rejected by a vote of seventeen to nine.

A resolution repealing the reduction of ten per cent., and restoring the pay of all other officers and employees, from the President down, (excepting baggage masters,) was adopted. The treasurer's salary was increased from \$2,500 to \$3,000.

A resolution voting \$5,000 to aid in completing the Union Railroad, between Marietta and Bellefore, was adopted.

The Committee of Transportation reported against a reduction of toll for way freights, which caused considerable discussion.

Mr. Travers moved to make a reduction of twenty-five cents from Cumberland to Baltimore, which caused a renewal of the discussion, and the whole matter was re-committed to the Transportation Committee.—*Clipper*, May 12.

The President and Directors of the Western Maryland Railroad have just published an exhibit of the agricultural and mineral resources of the country through which this road is designed to pass, and a statement of its condition and prospects. This publication is designed to afford to the capitalists of Baltimore, accurate information in regard to this improvement, with the hope of obtaining the means necessary for its speedy completion. The length of the road to Union Bridge, the present contemplated terminus, will be forty-two miles. Its cost, including right of

way, outfit, etc., is estimated at not more than \$720,000. Its means comprise \$250,000 of available stock subscriptions, and the balance in first Mortgage Coupon Bonds, bearing interest at six per cent. per annum and payable semi-annually on the first days of January and July, and of which something more than \$150,000 have been sold at 80 cents on the dollar. The bonds which have been sold are held chiefly by the farmers of Carroll county, who are also large stockholders and are manifesting a laudable energy and enterprise in the prosecution of this work. Twenty-three miles of the road are already graded, and 3,000 of the 3,300 tons of rails required for the whole length of the road have been purchased and paid for. With the assistance now desired to be obtained by an additional sale of bonds in this city, it is expected that the track will be completed to Westminster during the coming autumn, and to Union Bridge by the succeeding mid-summer.—*Daily Clipper*.

OUR RAILROAD TO THE SOUTH.

We are pleased says the Selma, Fla., *Reporter*, to learn from Col. Burr, who has just returned from the counties of Monroe, and Conecuh, that the prospects of the Selma and Gulf Company are steadily improving. He found the feeling in favor of the road much strengthened and increasing every day. The recent vote of Mobile to subscribe a million of dollars to their great Northern road (which is destined to form connection with our Selma and Gulf) is giving great confidence to the friends of the S. and G. in the value and importance of their road.

Col. Burr is inclined to think the Selma and Gulf Company may be ready to let their work to contract by June or July next, and on basis which will insure its completion in about two years. The surveys (which have been very extensive and thorough) are now completed, and the engineers have gone into office at Carlenville to make the estimates, maps, profiles, and plans of the work to be done. This will occupy the engineers some four or five weeks; when the engineer's report will be made to the directors, and they will then locate the road. Great interest is felt in some sections about the location. As soon as the location can be made, large amounts will be subscribed by many, as they are determined to have the road, believing it every way a good investment.

The free right of way for the road with depot grounds, etc., has been obtained on a large part of the lines surveyed, and this work will soon be finished. The intelligent and liberal minded planters along the various routes have acted worthily in their grants; and we trust they will soon have the pleasure of enjoying all the benefits of the road in operation, and connecting, as it will, both Mobile and Pensacola with all central, Western and Northern Alabama, Tennessee, Kentucky, and the great cities of the North and West. A wise spirit of liberality and energy displayed will achieve all this within two or three years.

Our noble friend, Col. Minter, President of the Company, is now in the highest spirits and is quite confident that the road will be built in less time than was at first supposed. For the deep interest taken, and untiring exertions used in the furtherance of this great enterprise, Selma owes to him a debt of gratitude. May he live to see Alabama what she will be eventually, the Railroad State of the South!

NEW JERSEY CENTRAL R. R.

The Annual Report of the New Jersey Central Road is before us, from which we gather the annexed figures:

The following is a statement of the ordinary receipts and expenditures for the year:

RECEIPTS.	
Passengers.....	\$176,175 55
Merchandise.....	298,762 73
Coal.....	361,934 08
Mail.....	7,600 00
Express.....	5,578 81
Rents.....	1,439 09
Miscellaneous.....	448 08
Total.....	\$870,953 34
Expenses and repairs.....	350,220 73
Balance net earnings.....	\$520,672 61

A comparison of the receipts and expenses of the past two fiscal years gives the following results:

	1859.	1858.	Increase.
Receipts.....	\$870,954 34	\$682,940 30	\$188,013 04
Expenses.....	350,228 73	323,747 68	24,533 05

Net earnings.....\$520,672 61 \$357,192 62 \$163,479 99

The receipts from passengers have been nearly stationary, owing to the continued stagnation of business, but are now on the increase. The receipts from merchandise have increased 10 per cent., with a prospect of a steady advance as business revives. The receipts from coal have increased 75 per cent., and are now the largest source of revenue.

The following is a statement of the financial operations during the year:

RECEIPTS.	
Gross earnings, as per statement.....	\$870,953 34
Stock issued for dividend.....	200,000 00
Sundry accounts.....	31,722 34
Materials, &c., on hand reduced.....	24,504 24
Cash from old account.....	2,629 40
Total.....	\$1,129,814 32
EXPENDITURES.	
Sundry property accounts.....	\$ 6,331 72
Income bonds, \$260,000, purchased for.....	215,650 00
Bills payable, reduced.....	42,827 05
Accounts payable, reduced.....	12,582 00
Ordinary expenses, as per statement.....	350,230 73
State tax, ½ per cent.....	23,251 34
Interest on \$3,000,000 mortgage bonds.....	210,000 00
Interest on incomes, notes, &c.....	40,672 23
Sundry charges for depreciation.....	13,499 01
Dividend, 10 per cent.....	200,000 00
Cash on hand.....	8,119 35
Total.....	\$1,129,814 36

The surplus receipts of the year have been applied to the re-purchase of the income bonds. Of the \$500,000 issued in the Fall of 1857 and Winter of 1858, at 75 per cent, \$260,000 have been redeemed at an average cost of 83 per cent. The difference between these two prices is charged against the year's earnings as a loss. A reduction in bills and accounts payable of \$55,409 95, has also been made. A few property accounts have been slightly increased, and the railroad account has been slightly reduced.

The profit and loss account has been credited with the gross earnings, \$870,953 34, and debited as follows:

Ordinary expenses, as per statement.....	\$350,230 73
State tax, ½ per cent.....	23,251 34
Interest on bonds, &c.....	256,672 26
Losses in re-purchasing income bonds.....	20,650 00
Dividend, 10 per cent.....	200,000 00
Balance of profit and loss account transferred, partly to credit of income bonds toward losses on future purchases, and partly to property accounts to cover depreciation.....	19,490 01
Total.....	\$ 870,953 34

By this statement it will be seen that the balance of the earnings which remained, after deducting expenses, taxes and interest, was \$240,149 01, equal to 12 per cent on the \$2,000,000 of capital stock. The interest, \$210,000, paid on the \$3,000,000 mortgage bonds, added to the above \$240,149 01, gives \$450,149 01 as the return on the \$5,000,000 stock and bonds, equal to 9 per cent on the whole if it had all been stock. After deducting the losses incurred in purchasing income bonds and reserving \$200,000 to cover a dividend of 10 per cent, the balance of the account, \$19,499 01, has been applied (as was the balance of the previous year's profits) to the reduction of various accounts, in pursuance of the policy of keeping down the cost of the property as much as possible.

To represent the net earnings absorbed in the reduction of bonded and other indebtedness, a dividend of 10 per cent has been declared and paid by an addition of \$200,000 to the capital stock.

It is the intention of the Board to increase the capital stock by a further issue of \$300,000, and thus provide for the balance of the Income Bonds. It is not necessary to pay these bonds before 1863, but they must be "provided for" by a suitable fund before the net earnings are released from their lien, so as to be applicable to cash dividends. It is safe to assume that a cash dividend will be made in November.

CHICAGO, Great Western and North-Western ROUTE.

INDIANAPOLIS & CINCINNATI SHORT LINE



RAILROAD.

(VIA LAWRENCEBURG.)

Distance 110 Miles and No Change of Cars Between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS LEAVE CINCINNATI daily, (Sundays excepted,) from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6 A. M.—Chicago and Terre Haute Day Express—Through to Terre Haute, Lafayette, and Chicago, with but one change of cars.

SECOND TRAIN, 11:15 P. M.—Accommodation—The 4:15 P. M. train arrives in Indianapolis at 10:10 P. M.

THIRD TRAIN—Chicago and Terre Haute Night Express—8 P. M.—Arrives at Indianapolis at 1 A. M. This train runs through from Cincinnati to Chicago, with but one change of cars.

The above trains make close connections at

Indianapolis, Lafayette and Chicago,

WITH TRAINS FOR

Terre Haute,	Lafayette,
Springfield,	Jacksonville,
Rock Island,	Danville,
Galesburg,	Burlington,
Kenosha,	Milwaukee,
Mattoon,	Pana,
Naples,	Peoria,
Galena,	Dunleith,
Quincy,	Racine,
Prairie du Chien,	Decatur,
Bloomington,	Joliet,
Lasalle,	St. Paul,

And all towns and cities in the North-west.

Connections are also made at Indianapolis with the Peru and Indianapolis Railroad for Kokomo, Peru, Logansport, Fort Wayne, Toledo and Detroit.

Be sure you are in the right Ticket Office before you purchase your ticket, and ask for tickets

Via Lawrenceburg & Indianapolis.

THROUGH TICKETS,

Good until used, may be had at the Company's Offices, north-west corner Broadway and Front Streets, under Spencer House.

No. 1 Burnet House, north-west corner Third and Vine Streets.

Also at the Walnut Street House.

And at the Depot, where all necessary information can be had.

W. H. L. NOBLE, General Ticket Agent.

Commencing April 10, 1859.

OHIO & MISSISSIPPI RAILROAD.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCENNES, Cairo, and St. Louis, at 8:30 A. M., and 8:30 P. M.

Accommodation train at 5 P. M.; for Evansville at 8:30 P. M.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natches and New Orleans.

One Through Train on Sunday, at 8:30 P. M.

RETURNING—**FAST LINE**—Leaves East St. Louis, (Sunday excepted) at 7 A. M., arriving at Cincinnati at 10:10 P. M.

EXPRESS TRAIN—Leaves East St. Louis daily at 2:40 P. M., arriving at Cincinnati at 7 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the offices: Walnut Street House, bet. Sixth and Seventh Streets, No. 1 Burnet House, corner office; north-west corner of Front and Broadway; Spencer House Office; and at the Depot, corner of Front and Mill Streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for Passengers.

Commencing April 11, 1859.

LITTLE MIAMI —AND— COLUMBUS AND XENIA RAILROAD.

FOUR TRAINS DAILY.

Three Through Express Trains.

FIRST TRAIN—No. 1 Express, at 6 A. M., connects via Columbus and Cleveland; via Columbus, Crestline, and Pittsburg; Detroit via Cleveland and Steamers. This train stops between Cincinnati and Columbus, at Loveland, Deerfield, Morrow, Xenia, Cedarville, South Charleston, London, and West Jefferson.

SECOND TRAIN—No. 2 Express, at 8 A. M., connects via Columbus, Bellair, and Benwood; Wheeling, via Columbus, Steubenville, and Pittsburg; via Columbus, Crestline, and Pittsburg; via Columbus and Cleveland; Detroit, via Cleveland and Steamer; Springfield. This train stops between Cincinnati and Columbus at Plainville, Milford, Loveland, Morrow, Spring Valley, Xenia and London.

THIRD TRAIN—Accommodation, at 4:40 P. M., for Columbus and Springfield.

FOURTH TRAIN—Night Express, at 11:30 P. M.; connects via Columbus, Bellair, and Benwood; Wheeling; via Columbus, Steubenville and Pittsburg; via Columbus, Crestline and Pittsburg; via Columbus and Cleveland. This train stops at Loveland, Morrow, Corwin, Xenia and London. *Sleeping Cars on this Train.*

No. 1 Express through to Cleveland without change.

The Night Express Train, leaving Cincinnati at 11:30 P. M., runs daily, except Saturdays. The other trains run daily, except Sundays.

For all information and Through Tickets to Boston, New York, Philadelphia, Baltimore, Washington, Buffalo, Niagara Falls, Dunkirk, Cleveland, Pittsburg, Wheeling, and all Eastern places, please apply at the offices, Walnut Street House, No. 1 Burnet House, south-east corner of Broadway and Front Streets, and at the Eastern Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Superintendent.

Omnibuses call for passengers by leaving directions at the Ticket Office.

BALTIMORE AND OHIO RAILROAD.

GREAT NATIONAL ROUTE.

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the

West, South-West and North-West.

Fare to New York and Boston ONE DOLLAR less than via any other route.

TWO TRAINS

Leave Wheeling daily at 8:05 P. M., and 11:30 A. M. Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.

Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2.

Quick time and sure connections.

IF Inquire for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

E. F. FULLER,

General Western Agent.

L. M. COLE,

General Ticket Agent.

W. P. SMITH, Master Transportation.

WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, STROBRIDGE & CO.,
119 Walnut St., Odd Fellows' Building

April 11, 1859.

Cincinnati, Hamilton and Dayton, RAILROAD.

FOUR TRAINS
LEAVE THE SIXTH STREET DEPOT DAILY.

TRAINS RUN THROUGH TO RICHMOND, LIMA, SANDUSKY, AND DELAWARE WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND NORTH-WESTERN CITIES.

6 A. M. EXPRESS TRAIN—For Cleveland and Pittsburg, via Delaware, makes close connection at Crestline for Pittsburg, Baltimore, Philadelphia, and New York; and at Cleveland for Dunkirk, Buffalo, Boston and New York. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Munice. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

8 A. M. MAIL TRAIN—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STRAMER FOR DETROIT; at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at DELAWARE with the C., O. and C. Road, for Cleveland and points East.

4:30 P. M. TRAIN—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Connects, also, at Dayton for Troy, Piqua, Sidney, Lima and Chicago. Also connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago.

6 P. M. TRAIN—For Dayton and all way stations.

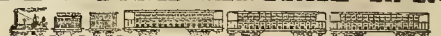
For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; No. 3 Burnet House; or at the Sixth Street Depot.

D. McLAREN, Superintendent.

New Time Table

OF THE

NEW YORK CENTRAL R. R.



	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp.	7 00 A. M.	7 00 P. M.	7 00 P. M.
Mail	9 40 A. M.	12 50 A. M.	
New York Exp.	11 15 A. M.	9 00 P. M.	9 00 P. M.
Night Exp.	5 00 P. M.	4 00 A. M.	4 00 A. M.
Utica Accom'n.	6 00 P. M.	Ar. U. 10 00 P. M.	
N. Y. Mail	11 15 P. M.	10 0 A. M.	10 0 A. M.
	Leave Buffalo.	Leave Bridge.	Ar. Alb'y.
New York Exp.	5 15 A. M.	5 15 A. M.	3 30 P. M.
Steamboat Exp.	8 00 A. M.	8 00 A. M.	8 00 P. M.
Mail			2 30 P. M.
Cleveland Exp.	6 00 P. M.	6 00 P. M.	4 40 A. M.
Cincinnati Exp.	11 00 P. M.	11 00 P. M.	8 30 A. M.
Utica Accom'n.			10 40 A. M.

AMERICAN AND FOREIGN PATENT AGENT.

THOMAS D. STEWSON,
SOLICITOR OF PATENTS,
And Consulting Engineer,
No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by

March 1858. Feb. 25. 1858. VOSE, LIVINGSTON & CO.,
9 South William St., N. Y.

RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, at shipping ports in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON & CO.
New York, Ap 3, 1856. 9 South William Street.

Union Works, Baltimore.

POOLE & HUNT, Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.
WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap2

ANDERSON, GATES & WRIGHT, STATIONERS, BOOKSELLERS,

—AND—

Blank Book Manufacturers,
No. 112 MAIN STREET,
East Side, between Third and Fourth Streets,

KEEP constantly on hand a large and well-selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,
Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,
(Successors to JACOB ERNST.)
112, Main Street, Cincinnati

SCHENECTADY Locomotive Works, SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES, AND TENDERS, AND RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding the work to any part of the country, without delay.

JOHN ELLIS, Agent.
WALTER McQUEEN Sup't. Aug 15

N. B.—We have two Freight Engines on hand suitable for the 4 feet 10 in. gauge. Cylinders 16 inches diameter, 22 inches stroke. Driving wheels 4½ feet diam. December 18th, 1858.

D. M. CARHART, TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builders.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address Respectfully Yours,

D. M. CARHART,
Box 183 Cleveland, Ohio.

T. F. RANDOLPH & BRO. Mathematical Instrument Makers Removed to No. 67 W. 6th St. CINCINNATI O.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Book-sellers, Country merchants, and others to extensive stock of School, Classical, Theological, Standard, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the publishers, as well as the principal manufacturers of Paper and Stationery, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

BOOKSELLERS,

Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, and Tea wrap-boards, Envelopes, Penholders, Copying Books, Ink and surses, Sealing Slates, Mucilage, Book rests, Bill envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files; Date Calendars, together with all other articles used in the counting-house.

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To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly paged, including all sizes, from the small memorandum book to the large Royal and Imperial Ledger, and variety of styles workmanship. Order of any description, with or without ruled and warranted to in quality of paper and durability of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

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We are prepared to Print and Bind books in any style desired, at rates as low as quality of work cut in this where. Our executing these the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Cards, Circulars, or tion of printing, will that we do such jobs despatch. Orders re-

Stereotype, of any description that may be desired, can be executed or else-facilities for branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Cards, Circulars, or tion of printing, will that we do such jobs despatch. Orders re-

Publishers,

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, Clark's Compendium, Dick's Works, Rol-

lin's Ancient History, Plutarch's Lives, Josephus, Spectator, Chain of Sacred Wonders, Familiar Science, Webb's Monitor, Soden's German, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, of narrative and Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

43 MAIN STREET CIN.

HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true high of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by
CHARLES W. COPELAND, Gen. Agent,
jy30 No. 66 Broadway, N. Y.

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use, and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines, and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair, Ohio Mechanics' Institute. June 18, 1855—1y

ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of Steam Vessels, Engines, Boilers, Mill Work, &c. Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS, And Railway Machinery of every Description, While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for ASHCROFT'S STEAM GAUGE, ALLEN and NOYE METALLIC SELF ADJUSTING CONICAL PACKING, DUDGON'S HYDRAULIC JACK, &c. Also, for Water Gauges, Indicators, Steam Whistles.

CHAS. W. COPELAND,
Consulting Engineer,
64 Broadway, N. Y.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned
THEODORE DEHON,
no13 10 Wal ar Broadway, New York

GENERAL RAILWAY SUPPLY AGENCY. SNOOK & HILL'S PATENT LOCOMOTIVE LAMPS.

83 Liberty Street, Cor. of Broadway,
NEW YORK.

JOHN W. KELLY
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

RAILROAD ENGINES & CARS,

ALSO AGENT FOR THE SALE OF

HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,

JUDSON'S GOVERNOR VALVE.

Orders solicited and promptly filled.

PROSSER'S PATENT

ORIGINAL LAP-WELDED

IRON AND STEEL BOILER TUBES,
SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

SOLE IMPORTERS.

PROSSER'S PATENT SURFACE CONDENSER for high pressure steam, with sea or other bad boiler water, gauges, 3 cutter drills, counter-sinks, tube end cutting bars, expanders, tube sealers, steel wire and whalebone brushes, pull lever wrenches, tubes—plain or enameled, screwed together for Artesian Wells, Hollow Slabs for various purposes, Steel for Rollers.
THOS. PROSSER & SON,
27 Jan. 28 Platt Street, New York.

G. G. LOBDELL. H. S. M'COMBS. D. P. BUSH.

BUSH & LOBDELL,
Wilmington - - - - - Delaware
MANUFACTURERS OF

CHILLED WHEELS
AND

TIRES,
For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent
FOR THEIR

CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE,

WITH OR WITHOUT AXLES.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

ap2

A Book for Every Business Man!

JUST PUBLISHED

—THE—

POST-OFFICE GUIDE!

For Post-Masters and Business Men.

CONTAINING

A Complete List of Post-Offices in the United States and Territories, arranged by States and Counties; A Complete List of all Distributing Post-Offices; Rates of Foreign and Domestic Letter Postage; Rates of Printed Matter, Transient and Regular; Abstract of the Laws and Regulations of the Post-Office Department, &c., &c.

COMPILED BY E. PENROSE JONES,

Late Assistant Post-Master at Cincinnati.

Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.

U. S. BLANK AGENCY, CINCINNATI POST-OFFICE, }
January, 1859.

This work has been carefully compiled and corrected by E. PENROSE JONES, Esq., late Assistant Post-Master of the Cincinnati P. O., from the Records in this Department, and other sources, and contains the most complete list of Post-Offices, especially of the Western, North-Western, and South-Western States, yet published.

MAHLON H. MEDARY,

Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an octavo pamphlet of about 100 pages. The entire matter is kept standing in type, and as the compiler is promptly advised of all New Offices, Changes and Regulations of the Department, the information is corrected up to the last day of publication, an advantage possessed by no other work of the kind.

OBSERVE, That this list is arranged by States and Counties, making it especially valuable to business men. No similar arrangement has been published since 1856. There are 3000 more offices in this than in any book heretofore issued. The Price is one-half that of any work of the kind now published.

If Single copies sent by mail (postage prepaid) to any address, upon receiving Twenty-five Cents in Silver or Postage Stamps. Five Copies sent for \$1.00, or Twelve Copies for \$2.00.

Address,

C. S. WILLIAMS,
194 Walnut Street,
Cincinnati, Ohio.

Mar10.1f.

MOSELEY'S TUBULAR WROUGHT IRON



ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs, are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeting always Iron.

The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges.

We are prepared to make these structures in any quantities, at prices about as follows:

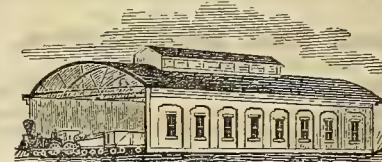
Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs.

\$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 persquare.

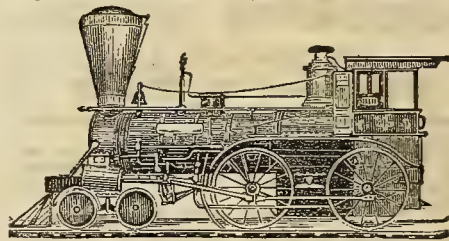
Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O.
may13. MOSELEY & CO.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20 MOORE & RICHARDSON.

THE KENTUCKY MILITARY INSTITUTE;

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, but more extended in Mathematics, Mechanics, Machines, Construction, Agricultural Chemistry and Mining Geology; also in English Literature, Historical Readings, and Modern Languages, accompanied by daily and regulated exercise.

Schools of Architecture, Engineering, Commerce, Medicine, and Law, admit of selecting studies to suit time means, and object of Professional preparation, both before and after graduating.

The twelfth annual term is now open. Charges, \$102 per half-yearly session, payable in advance.

Address the Superintendent, at "Military Institute, Franklin Springs, Ky.," or the undersigned.

P. DUDLEY.

President of the Board

Jan. 51f.

The Railroad Record.

E. D. MANSFIELD, } Editors.
T. WRIGHTSON, }

CINCINNATI:

Thursday Morning, May 26, 1859.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.

One square, single insertion,.....	\$1 00
“ “ per month,.....	3 00
“ “ six months,.....	12 00
“ “ per annum,.....	20 00
“ column, single insertion,.....	5 00
“ “ per month,.....	10 00
“ “ six months,.....	40 00
“ “ per annum,.....	80 00
“ page, single insertion,.....	15 00
“ “ per month,.....	25 00
“ “ six months,.....	110 00
“ “ per annum,.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

THE European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

ROBBING THE RAILROAD.—For some time past certain parties have been engaged in robbing the Baltimore and Ohio R. R. Company of brass, iron, tools, and other articles of value which could be easily carried off. Such things have not only been stolen from the workshops but from the several depots and cars of the Company, and the depredations have been of such frequent occurrence as to induce the officers of the road to keep a sharp look out for the guilty parties. A few days since the police of the Southern District arrested two young men upon the charge of being connected with the thefts, and soon afterwards learned that a third party, named Adam Nicholls, a shoemaker residing in Cumberland, Md., had received much of the stolen property, knowing at the time that it had been stolen. Accordingly policemen Van Holland and Peacock left here on Monday for that place and, taking the accused into custody, brought him on here yesterday afternoon. He was taken before Justice Showacre, who committed him to jail, in default of security, to answer the action to the Grand Jury. The Company state that the articles were stolen in Baltimore, and, therefore, they design having the parties tried here. It is their intention hereafter to prosecute all such offenders to the full extent of the law. A considerable quantity of articles were found by the officers, in the house of Nicholls.—*Baltimore American*.

THE PITTSBURG, FORT WAYNE & CHICAGO RAILROAD.

This is one of the most important Railroads in the country, and we propose to exhibit its leading features, in a clear and complete manner. To do this, we have before us the Second Annual Report of the Company, which is a model in the way of reports, and when we examine it, and find every thing we want, we regret that the officers of railroad companies generally are not careful to do the same. It is true that, in making out an exact Statistical Exhibit of the affairs of any Company, there will be many things stated which are of no particular advantage to the company, and may give its officers a good deal of trouble. But let them remember, that the object of this class of Statistics is not altogether to find out what one company is doing alone, but what it is doing in connection with others, as part of a system, and in performing a part in general commerce, and in developing the resources of the country. In this view, it is important to state just what this company has done; the movement of all classes of business, and the precise transaction of each station. We see precisely what the Pittsburg, Fort Wayne and Chicago Road has done.

This Company is consolidated from three Companies, viz: The *Ohio and Pennsylvania*, the *Ohio and Indiana*, and the *Fort Wayne and Chicago*. Its whole length is 467 miles, of which there are:

In Pennsylvania.....	49 miles.
In Ohio.....	250 “
In Indiana.....	145 “
In Illinois.....	23 “

It forms a part of a continuous west line, from Philadelphia to Chicago, and thence to Galena and Iowa. The entire length of the line with which it is immediately connected, is:

Philadelphia to Pittsburg.....	353 miles.
Pittsburg to Chicago.....	467 “
Chicago to Dubuque.....	188 “
Dubuque to Manchester.....	50 “

Aggregate.....1,058 “

To Cedar Falls, (Iowa) which we suppose to be now finished, will make about 1,120 miles from Philadelphia to the heart of Northern Iowa. Of this line nearly half is the part belonging to the Pittsburg, Fort Wayne and Chicago Company. It passes through the most important part of four States, and connects the following commercial towns to which we attach the population, by the most recent accounts:

Pittsburg.....	120,000
Massillon.....	4,000
Wooster.....	4,000
Mansfield.....	6,000
Fort Wayne.....	10,000
Chicago.....	110,000

Thus, in these towns alone are 240,000 inhabitants, while the road passes through numerous county seats and villages, which would make the town population on the line 300,000.

The cost of such a road has, of course, been large, and, as like other roads, it was not

built for cash, there has been more expended, than the cost merely of the road. The actual cost was as follows:

Cost of Road and Equipment.....	\$14,631,111
Cost of Real Estate.....	971,604
Actual cost.....	\$15,602,715

Of course, in so great a construction, with interest running on, and various incidental expenses, the capital of the Company will be represented by a larger sum, than the actual cost, but in this case the difference is hardly as large as we should expect. The capital of the Company stands thus:

Capital Stock.....	\$6,260,555
Mortgage Bonds.....	9,629,765
Floating Debt.....	1,755,952
Aggregate.....	\$17,646,252

A part of the last item should be offsetted with bonds and cash in hand, which amount to upwards of \$800,000.

The Earnings of the Road for 1858, were.....\$1,567,232
Total Expenses, including interest on Floating Debt.....1,087,311

Net earnings.....\$479,921

This is about 3 per cent. on the *whole capital*; but fall a little short of enough to pay interest on bonds. The year 1858 was probably as trying to Railroads, as any one likely to occur in many years. The *freight* earnings of the road have increased; but the *passenger* earnings largely decreased. We may here remark, that *passenger* earnings will always fall off most in times of commercial depression. When there is to be a *curtailment* in social expenses, it will be made in matters of *non-necessity*; and traveling is one of these. In the highly prosperous state of our country, tens of thousands of persons are constantly traveling for mere pleasure, and the largest part of these are by no means persons of wealth. They are those who have a good, but small business, and in prosperous times, have a few dollars to spare, which they generally dwindle between dress and traveling. In adverse times, the dress makers and the carriers are made to feel the cutting off of the small streams of surplus revenue. In such times railroads, dry goods merchants, and fancy dealers are all made to feel the evils of a diminished demand for their services.

Mr. EDGAR THOMPSON, the President, and who seems to have managed the road remarkably well, says:

“The completion of your road occurred at a period of unusual depression in the business of the whole country, which, in the north-west—the region penetrated by this extension—was still further aggravated by the failure for two successive seasons of the cereal crops of all that section. From these influences, added to the low prices that have prevailed in the Eastern and European markets for the comparatively small surplus products raised, the traffic of the line thus far has not reached the estimates heretofore stated. The results, however, have demonstrated that it will be ample to meet the interest upon all of the obligations of the Company. The net profits

of the Road during the past year, notwithstanding the large amount of dormant capital invested in the extension of the line, and the contracted business of the whole country, have fallen short of the amount required to meet the interest obligations of the Company, but \$83,938 26. If the traffic of the line should only increase in proportion to its increased length, the receipts of the present year would be \$1,900,000. Assuming 60 per cent. as the cost of operating the line, there will remain a net profit to meet interest upon the funded and unfunded debt of the Company, of \$760,000, which will be sufficient for that object."

This is probably a correct estimate of the result. It is certainly not an over sanguine one. The line from Plymouth (Ind.) to Chicago (83 miles,) was completed, we believe, last year, and will undoubtedly largely increase the receipts of the road.

The nature and amount of business done by the road, will be clearly shown by two or three brief table.

The following is a table of agricultural products carried over the road:

	Eastward.	Westward.	Total.
Head of Horses.....	1,532	1,074	2,606
" Cattle.....	16,672	185	16,857
" Sheep.....	57,643	280	57,923
" Hogs, (live)....	154,562	2,391	156,953
" (dressed).....	10,432	1,173	11,605
Barrels of Beef.....	6,375	9	6,384
" Pork.....	26,074	16	26,090
" Flour.....	188,537	3,069	192,626
Bushels of Grain.....	1,155,275	126,594	1,281,779
Bbls. of Foreign Liquors	435	497	932
" Domestic " ..	20,553	4,315	24,868

The Report, as we have said, gives the business of each station, which is an important matter in Statistics. From these, we learn, that by much the largest part of all this agricultural produce comes from Central Ohio.

The live stock from Ohio amounted to the following:

Hogs.....	156,394
Sheep.....	52,369
Cattle.....	14,519
Horses.....	2,354

This is seven-eighths of the whole number. The same thing is true of the grain; so that, in reality, this is mainly an Ohio Road. Of 439,000 passengers carried, 220,000 came from Ohio stations.

Mr. MOORE, Superintendent, furnishes the following table, which is really valuable, as a part of railroad experience.

MISCELLANEOUS.

Average earnings per mile of road.....	\$4,018 54
Transportation expenses per mile of road.....	\$2,389 47
Per cent. of receipts absorbed by expenditures.....	59 46-100 cents.
Average cost per mile run by engines, excluding those with gravel trains, as per statement.....	71 26-100 "
Average cost per car hauled one mile.....	9 11-100 "
Average cost per passenger or ton of freight transported one mile.....	0 96-100 "
Average cost per ton of train hauled one mile, including engines and cars, and estimating twelve passengers and their baggage as a ton.....	0 53-100 "
Average weight of passenger trains in tons, including passengers.....	90 43-100
Average weight of freight trains in tons, including freight.....	199 66-100
Average per cent. of dead weight to paying road, including passenger and freight trains.....	78 1/2
Average number of cars in passenger trains, including baggage and post office.....	4 05-100

Average passengers per car.....	17 6-10
Average number of passengers per train.....	43 67-100
Average number of freight cars in merchandise trains.....	12 nearly.
Average tons of freight per train.....	59 53-100
Average tons of freight per car.....	5

To this, Mr. Moore adds another table, the object of which is to show the constants and inconstants of the transportation department. The constant shows the expenditure necessary to operate the road, not depending on the fluctuation of business; the inconstant, those which are directly affected by the increased or diminished traffic, or mileage of trains. In this road, the "constant expenses" average 24 cents per mile, and the "inconstant" 47, and the aggregate 71.

It would be well for all railroads to keep as accurate and systematic Statistics, as this has done. It is only in this way that we can arrive at general results, which are valuable to the holders of this species of property. For example, the tables of business for this Company show, that it has a very large reserved fund of business—if we may so speak—which will be developed hereafter. The 200 miles of Road in Indiana and Illinois, now produce very little; but will probably produce as much as the Ohio part, when it is fully settled and cultivated. So also, the almost indefinite extension through Iowa and Nebraska, will prove in the end very productive to this Company. If this Company be as well managed hereafter as it is now, we should say, the Stockholders might in a few years look forward to a steady income of seven or eight per cent. Say, the road earns \$2,500,000 per annum, and the expenses are 60 per cent., (rather higher than they ought to be,) the net income will be \$1,000,000 per annum, and this will pay interest and a dividend of seven per cent. to the Stockholders. That it will earn so much, we have no doubt. The only question is, whether its expenses and construction can be kept within such limits, as to save so much net proceeds.

In conclusion, we may congratulate the managers of this road, in having done so well, amid such difficulties, and return them our own thanks for so clear and valuable a Report.

SOUTHERN PACIFIC RAILROAD.

We call attention to the reported proceedings of a meeting of the stockholders of the above Company in another column. We regret that the proceedings were not characterized by that harmony and unanimity that is so necessary to the successful accomplishment of great works. That there has been many things to complain of in the past management there can be no doubt, and it is well they should be brought up in review, that similar errors may in the future be avoided. The truth is, it is really and absolutely necessary for the well being of our country in time of peace, and its actual existence as a whole in time of war, that a railroad to the Pacific should be built, and that immediately, and upon our own soil; and if the whole nomi-

nal capital stock of the Company (\$100,000,000) had been swamped and the road was in running order, as a nation we would be great gainers, although there would be necessarily many cases of individual hardship and loss. Were we governed by the will of a single person it would have been completed ere this, and the shrill whistle of the locomotive have echoed among the peaks of the back-bone of the continent, and would have done more to civilize the western wilds than all the efforts of missionaries, whiskey and six shooters combined.

We understand that a large number of the Stockholders called on Dr. Fowlkes on Tuesday and paid up their assessments on stock as required by the action of the Company, and that Col. Todd will remain at the Burnet House a few days to wait on others that may desire to call on him either for information or business.

CIN., WILMINGTON & ZANESVILLE RAILROAD.

RECAPITULATION OF EXPENDITURES.

Ordinary expenses.....	\$139,416 95
Less chargeable prior to March, 1857.....	8,400 00
	\$131,016 95
Extraordinary expenses.....	\$32,148 39
Less chargeable prior to March, 1857.....	17,953 60
	14,194 79
Actual ordinary and extraordinary chargeable to the year.....	145,211 74
The whole amount of these extraordinary repairs are charged to the year's business, i. e.	
To Passenger Department.....	\$69,377 23
To Freight ".....	102,168 11

Or total to both departments..... \$171,565 34

CONSTRUCTION OR CAPITAL EXPENSE.

Shop.....	\$1,354 16
Widening Road.....	3,065 98
Ballasting.....	1,828 69
Engines and Firemen.....	470 39
Repairs Const. Eng.....	804 97
" Gravel Cars.....	419 81
Side Track.....	130 40
Telegraph.....	82 23
New Tools.....	165 32
Equipments.....	478 61
Oil, etc.....	265 06
Sundries.....	12 58
Patent Rights.....	66 90
Real Estate.....	38 33
Coal Cars.....	1,328 66

Total amount..... \$10,777 29

Which sum covers the ballasting of six miles of road, and sundry other improvements of value.

NEW YORK AND ERIE RAILROAD, MAY 1—The entire bills payable outstanding, \$543,380 20; unpaid coupons on unsecured bonds, including those in hand of sinking fund, \$445,095. The wages of the men are paid up to 1st of March. Supplies being purchased for cash are paid up to the 1st of April. Total amount of fourth mortgage bonds issued, \$3,513,000; leaving applicable to floating debt, \$2,487,000; if the balance were negotiated on the terms proposed by the Company it would produce in cash, \$1,243,500, which would leave, after paying entire floating debt and all past due coupons on the unsecured bonds, \$255,000.

This does not look so hopeless as to warrant the present depreciation in the securities of this great enterprise. The road and equipments have been much improved during the last eighteen months, greatly enhancing the real value of the property of the Company, and at no previous period has there been so few unadjusted claims against the company.

The foregoing appears in the New York Express, and is published officially.

PACIFIC RAILROAD.

Speech of the Hon. Jefferson Davis, of Mississippi, on the Pacific Railroad Bill, delivered in the Senate of the United States, January, 1859.

(CONTINUED.)

But above this, or these, or all else whatever, the great point to be considered is, have we the *constitutional power*? If we have not the constitutional power, then I have argued for a necessity military and political, argued for advantages in peace and in war, wholly to no purpose. If the Constitution does not confer the power, there is an end of the question. It is proper, therefore, to treat of that point before entering into any discussion as to routes.

The substitute which I propose is confined to the Territories. It has been argued here that there is no difference between a State and a Territory. I hold to the other doctrine. I hold that a State is sovereign within its limits; that the power of the General Government to enter with an artificial person—a railroad corporation for instance—the limits of a State, does not exist as a constitutional right, and can not be derived from the consent of a State. We heard yesterday that States and Territories stood upon the same platform in this regard, if the States would but consent to allow roads to be run within their limits. Is this so? This is but a new phase of that doctrine of squatter sovereignty, with which, from the time I first took my seat in the Senate, I have been battling, and which I intend to oppose to the end. Is it true that the Federal Government can walk within the limits of a sovereign and there take land and exercise jurisdiction as within a Territory? Is it true that the restrictions of the Constitution limiting the General Government to the control of sites purchased with the consent of the States for the construction of forts, arsenals and dock-yards, mean that by the consent of a State, they may exercise a like power for any and every purpose within its limits? If so, why enumerate the objects? Why narrow them down to special things, and those things such as were known to be usually most necessary? Can the United States purchase a tract of country across a State, there to build and administer a railroad? I hold that they have no such power under the Constitution, and the consent of the State can give them none. Can the Government of the United States create a corporation and send the artificial person to exist within the limits of a State? I, and those from whom I have drawn my political opinions, have long held the reverse. That question came up distinctly upon the old United States Bank: it has been decided by the people; it is needless for me to re-argue it.

The grants of the Constitution restrict the Government to special purposes. To hold control over land within the limits of the States, even for those specific and most needful purposes enumerated in the Constitution, it is required first to get the consent of the States. I say, then, the consent of a State can give no power to the Federal Government which it could exercise for railroad purposes within the limits of a State. It might be very convenient as a means of military defense; it might be necessary as a means of military defense; and still I say this Government has no power even when you prove the necessity to exist, to invade the limits of a sovereign State, there to set up its artificial creature, and exercise a jurisdiction which the Constitution does not give.

Within the Territories, I hold our relations to be different. The United States have derived territory either by cession from one of the United States, or by acquisition from a foreign Government, and they have, as a consequence of the grants of the Constitution, the authority to do within that territory whatever is within the power of the Federal Government. They can not do all which a State could have done over the territory before the State ceded it, because the State was inherently sovereign; the Federal Government has only those powers which have been delegated to it. All of those powers it may exercise upon a territory when it derives it either by cession from a State or by acquisition from any other sovereign Power, deriving from the deed of cession, the sale, or the annexation, whatever power it was competent for the Federal Government to receive and execute. All else remains in other depositories, and those depositories not rendering it possible to exercise it must there remain inactive until the people inhabiting the territory shall become a State. Then they will be invested with the sovereign power which the Government of the States united could not use, though received at the date of the cession, annexation, conquest, or purchase.

Within the Territories we find that from the foundation of the Government, the United States have always exercised the power to construct roads, to establish a corporation, for instance, the corporation of a Territorial Government, to support it, paying its Governor and its Council, or when it rose to the higher grade, paying its Legislature, thus exercising all the powers within the Territory which belong to the trustee holding under a specific authority.

If the view which has been taken of this subject from the foundation of the Government be correct, (and it is hardly needful for me at this day to vindicate it,) there is power in the Federal Government to appropriate money for the construction of a road within a Territory; not an absolute, unlimited power, because every Government which the Government holds is for some object enumerated in the Constitution. The power to appropriate for the construction of military roads generally, is a different question, but that it exists within a Territory has been so long admitted, so uniformly acted upon—acted upon at the last session, and no doubt may be acted upon this—that it is hardly needful further to argue it here.

But it is said you can not construct a railroad, though you can construct any other character of military road. If gentlemen had said this Government could not administer a railroad, they would have been putting themselves somewhat upon the ground taken by Mr. Monroe, when he vetoed the Cumberland road bill, upon the ground that the General Government could not erect toll-gates within a State. If they had said we could not administer a railroad, even in a territory, I should grant there was force in the objection, and should have admitted that I entertained the same difficulty, that I reached the same conclusion; but the construction of a road, whether it be of dirt, stone, or of iron, must belong to the same general power of the Government, and if it exists for one, it must exist for the other and for all.

Having asserted the power, with the restrictions which I think imposed by the Constitution, it only remains for me to say that I was very happy to discover in the course of my examination that it was not required that the General Government should build this road

out of the public Treasury; that it need only contribute, in proportion to the pecuniary interest it had in comparison with that of commerce in the construction of the road; and it is this commercial connection, which has subjected the proposition to the criticism that the road was to be built for commercial and not military purposes. No one believes that the amount of money proposed either by the bill or the substitute will build the road, if that alone is to be contributed. Either would fall far short of the requisite sum, and neither was viewed otherwise than as aid in a work which the public good required.

If in any case it be constitutional to construct a railroad when it is necessary for military defense, we must take the responsibility in this, as in all other cases, of relying upon the discretion of the agents of the Government, that they will not pervert the recognition of that which is necessary by using it where it has no such application. If gentlemen are to be deterred from undertaking a public work because of the abuse which it is possible may result from it, I would ask what appropriation have we ever made from which we should not have been likewise restrained. We have made an appropriation to extend the Capitol. Does the exercise of that power involve the right to go on and build a house that will cover the District of Columbia? And yet the absurdity which is resorted to in order to prove the impropriety of this measure, would be as applicable in the one case as in the other. As to the old argument of the abuse of power, it belongs to everything. Government is a practical thing. It is to be administered by men. Our Government was founded by honest men. It can only be administered by men both intelligent and honest. The abuse of any power which we possess might be arrayed as an argument against its exercise. I think it may be very well stated in this, as in other cases, that those powers which are most useful, most readily run into abuse. It comes within the maxim, the worst is the abuse of the best.

If, then, it be admitted that there is constitutional power, and that it is expedient upon the limited scale which I propose to exercise it, it but remains to consider the practicability of the project.

In the outset of this question, however, the authority upon which the conclusion of the practicability of a particular route was based, was doubted; the evidence was said to be insufficient, and such as no prudent company would accept, if they were about to locate a railroad. The Senator from Massachusetts, [Mr. Wilson,] particularly, made those objections. It is true that these explorations were made by officers of the Army, educated as engineers, and that they belonged to that class, without which, I believe, no great work of public improvement in the United States has ever been conceived and executed. If there is one great work of public improvement in the United States which has been conceived and executed without the aid of some member of this particular class, I am not aware of it. The Senator from Massachusetts would have found, by turning to his own State, that the railroad system which exists in it, was initiated, the surveys conducted, and the work progressed usually to completion, in the hands of military engineers. I can refer to some of the names: William Gibbs McNeil, George W. Whisler, Daniel Tyler, Joshua Barney, Isaac P. Trimble, John M. Fessenden, Childs, Barnes, and a great many others. At a very recent period, the professor of civil engineering, in the University of Harvard, was an officer of the Army, who resigned his position to take

that professorship. They are the men over this whole land who have inaugurated the great works of civil engineering which have been successfully executed. They were the teachers. It is their pupils who now rise in rebellion against them, and, anxious for employment, arraign the masters for incompetency to do the work which they taught them to perform. I could refer to almost every State, and bring out the fact that their works of internal improvement were generally planned and conducted by those who either were at the time, or had been military engineers. So much for the character of the evidence on which I rely and the capacity of the men.

During the course of this debate, I have felt how fortunate was the selection of military engineers for these explorations. It was foreseen at an early stage of the debate, that we were, at last, to run into this poverty-stricken sectional quarrel—a thing from which I always turn with loathing; for which I feel only contempt. Fortunate, it was, in this view of the case, that men were selected who, in their very boyhood, were separated from the interests of any locality, educated for their country and in its service, who are bound by habit, as well as by other ties to their country, their whole country, and who went to these explorations without the influences that would sink them to the petty purposes which, it is too clearly indicated, must influence some portion of the argument we hear in this Chamber. The officers thus selected had their fame connected with the route they explored; they had their honorable sense of duty, and their professional reputation, involved in the exact presentation of the truth. If they could truly show that they had discovered a favorable route, the best over which a railroad could be built, and thus identify themselves, to the end of time, with the exploration they had made, it was human ambition to do it. So far, then, as any thing thing is said unfavorable towards the line they explored, it is to be set down to principle, to the love of truth, and the suppression of that ambition which would make every explorer desire to find the most practicable and economical route. When compendiums are made by drawing from the reports what each has said in relation to his own route, it is to be supposed that the most favorable aspect of each case is presented, and that the comparative merits derived from these is probably that which future surveys will but corroborate.

I will not allude to the region in which these officers were born; I leave others to do that; because it matters not to me whether they came from Maine, or New Hampshire, or Massachusetts, as they did, or whether they came from Georgia, South Carolina, or North Carolina, as they did not. I believe they had the intellectual endowment, the education, the character, and the purpose, which makes their reports more reliable than any we could otherwise have obtained; and it so happens that where these barometrical observations which have been criticised were made, and have subsequently subjected to the test of the level, been the difference is so small that a contracting party would not care for it one way or the other, showing that a method which is not usually relied upon, in the hands of men trained and skillful, was brought to such perfection as to answer the purposes of the level.

It will be seen before I get through, however, that I do not rely upon their testimony alone; for I shall adduce the evidence of others which may have more weight with those who have discredited military engineers.

Before referring to the results of the explo-

rations, it is proper that I should reply to certain strictures which have been made upon the fairness of the Government in directing them. Mr. President, I feel very reluctant to misapprehend the Senator from Massachusetts, and to reply to his remarks without correctly understanding their meaning. Therefore I wish to ask him whether, in arraigning the last Administration as having used all its power to "belittle" northern lines and to "magnify" the extreme southern line, he intended to imply a want of integrity in the performance of the duty assigned to it to find the most practicable and economical route?

Mr. WILSON. I will say, in regard to that, that the Senator from Mississippi had for four years the direction of these surveys, and I do not question here, or anywhere else, his integrity; but I do say, what I believe to be true, and what I think any man who has ever read the reports of the surveyors, and his own comments upon them, his own deductions and inferences, and who has examined carefully the policy of the Government, will say, that his general opinions, his feelings, or some matter that might spring from his location in the country, and from his general views, did, to a certain extent, color his actions. I do not here question his integrity or his honesty in any way whatever; for, so far as my experience goes, I have no reason to do it; but I do say that I think no intelligent man can rise from the perusal of those volumes and not say that he thinks the Senator's elaborate report on the surveys is not sustained by the evidence in the surveys; and that the Government, by its purchase of territory, introduction of camels, by its sinking of wells, and all its other policy, has elevated the southern route, and let the others, to a great extent, take care of themselves.

Mr. DAVIS. Then, Mr. President, the Senator attributes to me a bias on account of my residence. I believe no man loves the section in which he lives better than I do. Every fiber of my heart would respond to the rights and the interests of that section, whenever they were involved. But I feel, sir, that a public officer has a higher duty than that which his sentiments and his feelings prompt, and think I can show to the Senator that he is entirely mistaken in the conclusion at which he has arrived. As he does not question my motives, so I shall not impugn his; but from the record will conclusively prove to him, or to any other man who may be prejudiced like himself, that if there be a difference at all, it is upon the other side. I am not conscious of ever having favored one line or the other; but if the record leads to such conclusion, it must convict me of having favored the extreme northern line; so it stands.

It will be remembered that when Congress made an appropriation, directing the War Department, by topographical and other engineers, and other persons, to explore the country, so as to determine the most practicable and economical route for a railroad from the Mississippi to the Pacific, I was at the head of the Department of War. I organized companies to survey lines wherever previous explorations or even the reports of trappers and hunters indicated that there might be a practicable route for a railroad. Although I believed, from examination partially made, that a particular route would be found impracticable, nevertheless because of the constant assertions made in the two Houses of Congress of its feasibility, a party was organized and explored it. It was the only line which was finally pronounced wholly impracticable.

First, as to the manner in which those par-

ties were organized. On the route of the forty-ninth parallel, a party was organized, at the head of which was placed a gentleman recently distinguished as an officer of the engineer corps, who had been for a long time employed on the coast survey, and who, therefore, was particularly trained to the character of exact observation which he would be required to make. He had recently left the United States military service and been appointed Governor of the Territory of Washington. Where, in the whole length and breadth of the land, could I have found a man with higher indications of qualification, or one who could have been supposed more earnestly to desire to find a practicable route to that Territory, than Isaac I. Stevens, who was appointed to the command of that party? Not only did I select the person thus described, but his was the first party to whom instructions were given, the first party for whom any provision was made. This was because I knew it was the most difficult exploration, and, therefore, should have the largest amount of time; not to favor one route more than another. I had no purpose but to perform my duty like an honest man. I am glad that my motive has not been arraigned.

Not only was this party the first organized and a man thus specially qualified put in charge of it, but the quartermaster's department was required to furnish trains at great cost, and even to turn over to it a large sum of money, not less than \$15,000. A corps of sappers and miners were given to it, and a number of military officers not furnished to any other expedition. Now, perhaps, I may be asked by the advocates of the southern line, why was this done? My answer is, it was an unexplored region; it was filled with savage and hostile Indians, and the party was organized to acquire that sort of information which was necessary not only for a railroad, but for the military purposes of the Government. Because of its peculiar relation to the inhabitants, and the wants of the country, it derived this special advantage, and received \$15,000 in cash from the quartermaster's department, besides the sum of money which was turned over to it from the appropriation for the specific work. There were seven officers of the Army attached to the expedition, besides the detachment of sappers and miners, some of whom were non-commissioned officers. Their pay was taken from the appropriation for the support of the Army, and not charged to the expense of this exploration. To the other exploring parties, only two officers of the Army were given; an advantage in favor of the northern line of seven to two. If to the sum of \$74,000, which was set aside for this exploration, be added one-half the sum expended by the party for explorations of the connections with San Francisco, \$21,000, it appears that this line received \$95,000 in money, out of the appropriation for the exploration and survey of routes; a larger sum than was given to any other route. I ask, then, how can a northern man whose eyes are not utterly blinded by his sectional prejudices, question the fairness with which money was distributed to the parties engaged in this exploration?

Next looking southward, on the route of the forty-first and thirty-ninth parallel, \$38,000 were given. Part of this region having been explored by Fremont and Stansbury, it was unnecessary to go over it again. This reduced the line of exploration, and consequently reduced the amount of money which was required for it, and, therefore, but \$38,000 were given. Adding one-half the expenditure for exploring the connections with San Francisco,

\$21,000, you find for this line a total of \$59,000.

On the route of the thirty-fifth parallel, \$58, were given originally. Adding one-half the sum for the connection with San Francisco, \$23,500, makes \$81,500 for this line.

On the route of the thirty-second parallel, \$29,000 were given; and, to ascertain the practicability of obtaining water by sinking artesian wells in regions of a certain character, west of the Rio Grande, \$20,000, for connecting with San Francisco, \$23,500, making the total on that route \$72,500; or, stating it by yearly expenditure, \$37,500 in 1854, and \$35,000 in 1855, making a total of \$72,500.

Now let us divide it between the two sections of the country. This apportionment was made purely by reference to the necessities of each case and the relative amount was not noted until I saw in a newspaper the miserable charge that this money had been appropriated to the benefit of the southern route. I then had a comparison instituted, and it turned out to be dollar for dollar, exactly equal—\$154,000 for the southern, and \$154,000 for the northern routes, regarding the thirty-fifth parallel as a southern route. This included both the first and second appropriations. In addition to these expenditures, there were others for the preparation and examination of the reports in the office of the railroad explorations. They were common to all, and therefore are so charged.

As to the sinking of the Artesian wells, the first expenditures were made on the line of the thirty-second parallel, and have been included in the charge against that line, though, in fact, they were for the interest of all. Afterwards, as it had not proved successful, but was attended by such indications as rendered it probable that water could be brought to flow on the surface of the earth, Congress, without the recommendation of the Department, made an appropriation of \$100,000. Why charge that against the administration? I say, that without the recommendation of the Administration, Congress made that appropriation. They made it for a larger sum than I believed to be necessary. The officer returned to the work and prosecuted it without success, and it is now probable that we are to be disappointed. At the last accounts received, a vein of water had been struck between two strata of rock, and the current flowed with such velocity as indicated an open channel, and destroyed the probability that it would ever rise to the surface. Whether the boring has been commenced at another point, I am not informed. It is not at all improbable, however, that in the same region he may strike water which would rise to the surface of the earth.

Why were these artesian wells attempted? The Senator seems to think it was to render a line practicable which nature had rendered otherwise. Not so. It is true, the boring of these artesian wells was connected with the question of the railroad, but it was connected with a much broader question. It was: whether all that arid desert which separates the population of the East and the West, upon every line of exploration, could ever be rendered fit for the habitation of man. If artesian water could be made to flow upon the surface, it would first produce grass, subsequently timber, and a country which otherwise would remain a desert forever, would be made the habitation of man, and be converted to the uses, if not of agriculture, at least of pastoral life. It was but tributary to the railroad. It was commenced on the *Llano estacado*, not far from the river Pecos, because that was be-

lieved to be one of the most feasible points, and that if it should succeed there, it would probably succeed on the desert plains all the way north to the British possessions. If it had succeeded there, I do not doubt that experiments would have been made hereafter by companies—the expense would be beyond the power of individuals—and that districts would have been converted to pastoral uses; I trust yet, there are many in the Senate who will live to see the day when that will come to pass, and when a country where rain and dew are denied by meteorological condition, will be rendered fit for the uses of civilized man, and contribute greatly to expand, not merely the wealth of the West, with which it is geographically connected, but the wealth of our whole country.

Having thus disposed of the charges brought against the manner in which the field work was directed, I now proceed to notice the criticisms upon the conclusions announced in the Secretary's report, which have been questioned in a manner that would seem to indicate that the document itself has been left unread. It will be found on examination, in the first place, that I did not announce to the country that such a survey had been made as would justify capitalists in locating the road; did not say that the question was concluded for all time to come; but did say, as will be found on the eighth page, that—

If the results of the exploration made under these instructions do not furnish the data requisite to solve every question satisfactorily, they at least give a large amount of valuable information, and place the question in a tolerably clear light. We see now, with some precision, the nature and extent of the difficulties to be encountered, and, at the same time, the means of surmounting them.

This is in the first volume of railroad explorations; and I may also state that in this volume is contained the report of the survey of the route near the forty-ninth parallel, being the only report contained in this volume, and thus given to the public more than a year before any other was published. It had in this another advantage; and here let me state how it arose. Governor Stevens, having charge of this exploration, made his report first, and thus secured for it the earliest publication.

In treating of this northern route, I did not, as the Senator seems to assume, declare that it was impracticable. On the other hand, I stated that it was practicable—practicable, but vastly expensive; expensive because of its tunnels; expensive because of the short curves so well described by the Senator from Iowa; expensive, also, because of the heavy embankments which were to be made, and which, in the very brief period of these explorations, could not be accurately determined. The probability now is, that if we were to return to the examination with more extended observations, we should find the level of those streams at the periods of greatest flood, such that the embankments would exceed the estimates which have been made, and, consequently, would have to increase the estimated cost of constructing the road on that route. This line will receive further attention when I discuss the character of the different routes. It will then be shown that every statement of an unfavorable character in relation to it contained in the Secretary's report, is amply sustained by the reports of the explorers.

(TO BE CONTINUED.)

The Saginaw (Mich.) *Enterprise* states that the Flint and Pere Marquette Railroad Company are going forward with the work in earnest, having nearly one-third of the distance between Saginaw and Flint already graded.

THE PANAMA RAILWAY.

BY V. WYATT, C. E.

There are but few public undertakings which have so much interest attached to them as the Panama Railway; connecting as it does the two large oceans of the world—the Pacific and the Atlantic—and traversing the backbone of an isthmus which hitherto had been deemed insurmountable; passing to and fro the commerce of the eastern and western parts of the world, and opening up the riches and glories of the Pacific,—this railway bids fair to assume great commercial and general importance. India, Australia, California, British Columbia, and the rich provinces of Central and South America, on the Pacific side, have had a new and direct overland route opened to them by the construction of this isthmus-railway.

A casual inspection of the American isthmus and the demands of commerce would seem to dictate that a canal between the two oceans, by which the shipping of the two seas could be interchanged without breaking bulk, would have been a far more useful and commendable work than a railway. So natural is this conclusion, that from time to time various and diversified have been the projects for a ship canal between the two seas, and these projects date as far back as the Spanish Conquest. Shortly after Columbus had cruised about and discovered the Central American waters, and when the enterprising Spanish cavalier, Nunez de Balbao, had actually mounted the Andes, and copied, for the first time by a European, the Pacific Ocean, more than three centuries since,—the world became convinced of the necessity of some great work on the Isthmus. There have been proposed from time to time, two different ship canals at Nicaragua—one with a Pacific terminus at San Juan del Tur, and another at Realejo in the Pacific, where the summit level in the former case is 615 feet above the sea, and in the latter about 212 feet. The latter route is somewhat circuitous and uncertain in its data. The Panama crossing of the isthmus has also been advocated, presenting equally favorable features for a canal as it does for a railway. There are no abrupt elevations and depressions; the distance can be made the shortest possible across the isthmus, being only about 30 miles in a straight line; and its greatest elevation above the mean level of the two oceans, by careful selection of country, need not exceed the highest point of the Panama Railway, which is only 263 feet, and this summit height being of very short continuance. Then there are the Darien and Atrato routes; the former of which is much controverted, and its assumed data are insufficiently supported by reliable surveys, the summit being stated by one exploring party to be all that the mind can desire, and by another and more recent exploration as beset with mountain ridges and insurmountable obstacles; the latter route (the Atrato,) has the objection of lockage up the rivers which descend from the summit each way, and it is very circuitous. There is no difficulty about the level of the two oceans, as the mean tide level of each are identical, the only difference being that the Spring tides in the Atlantic are only about eighteen inches, whereas in the Pacific they are from ten feet at San Juan de Nicaragua, to about eighteen feet at Panama Bay.

The climate of the coast of Central America and the Isthmus of Panama, is of the most unhealthy character, and quite unfitted for Europeans. The atmosphere is hot, steamy,

damp, miasmatic, and fever generating. The European when he lands on this coast, feels his energies relaxed, and his whole spirit depressed. This was the greatest difficulty the pioneers had to contend with in the construction of the Panama Railway. The railway works were of a light character, and would have been deemed trivial in healthy spots; but when the theater of operations was the Isthmus of Panama, then the problem was, not merely to organize men for their work, but how to keep workmen alive in such a pestilential place, continually attacked as they were by intermittent fevers and agues. Every gang of men was being continually broken up by disease, desertion, and excessive mortality. It has been stated that 10,000 men lost their lives in the making of this railway, and that the sleepers in the line count the number of bodies buried there; but this calculation, like many other popular rumors, is of course over-estimated. It is very certain, however, that the company did import on the Isthmus during the time the works were going on more than 3000 Americans, Irish, Chinese and Negroes, besides the casual supply of labor which found its way to the works from time to time. The major part of these men fell victims to the Isthmus fevers; the Chinese committed suicide to a wholesale extent; many succumbed to their intemperance and irregularities under a tropical sun; and some, including many shrewd Americans, "cleared off," and departed from the Isthmus as soon as the seeds of disease or the horrors of the spot became apparent to them. The inconveniences and risk of working in such a climate may be imagined from the fact that the temperature on the isthmus is from 82° in the morning to 90° mid-day Fahr. in the shade, and this continued all the year round, with no greater variation than 5° or 6°; and accompanied with this is the unhealthy steam from a tropical rainy season extending over eight months in the year. The sea water in the two oceans adjacent to the isthmus, taken at ten feet below the surface, averages 84° Fahr.

The Panama Railway starts on the Atlantic side from Navy Bay, at a point called by Europeans and New Granadians, Colon, and by the people of the United States, Aspinwall, after one of the railway promoters. Colon or Aspinwall town, which has been created by the railway, has a very backwoods-settler look about it, being composed of wooden houses, stores, shops, and hotels, and has only one permanent looking structure, viz., the railway freight and store-house, built of stone with an ordinary iron roof of 78 feet span. The American engineers point to this as the very *chef d'œuvre* of engineering. Aspinwall is on the eastern side of Navy Bay, on an almost submerged coral reef, standing only about three feet above the Atlantic. It is a wet, swampy, and aguish-looking spot; the rains are incessant; and yellowish-white unhealthy looking faces are visible everywhere amongst the railway employees and residents. Panama is considered a wet place, but in comparison with Colon or Aspinwall, it sinks into insignificance; the railway rain-gauge at the latter place showing a register in one rainy season of eight months, of 110 inches of rain. England is called wet with an average of 26 inches of rain for the year. Behind Aspinwall is a rotten swamp for miles, the miasma from which salutes the nostrils of the voyager when landing; and he is moreover advisedly informed that a residence of more than twenty-four hours for a new comer, will probably introduce him to a tropical fever. The old outlet on the Atlantic side for the mule travel of the isthmus

was at Chagres, situated to the west of Navy Bay, being at the mouth of the Chagres river; and a never-to-be forgotten place by Californian travelers, who have so often left the bones of their friends on its miserable shores.

The railway after leaving Aspinwall crosses the dismal swamp before alluded to for a distance of seven or eight miles ere it reaches terra firma; it then escapes from this floating bog, with all its rotten, rank, tropical vegetation. The greatest amount of mortality resulted on this part of the line in the first construction; here not only from the unhealthfulness of the situation, but also from a total absence of any properly organized commissariat to supply the men with the necessary and proper comforts; and also allowing the free circulation on the works of the raw spirits so cheaply imported on to the isthmus from the West Indies. Various were the expedients adopted by the American engineers in this swamp to form a foundation for the road, and to economise labor, time, and expense. Crib-work (the American term for large wooden boxes, formed of large timber logs, which are loaded with stones or gravel and sunk into position), fragile and temporary trestle-work, and staging on piles. All these methods have rotted and nearly disappeared, as might be expected in a climate where the durability of timber is estimated by months instead of years; and this fragile and temporary work is being substituted, or rather buried up by a filling-in of good, hard, dry, rocky material, with occasional tips of clay to bind the whole together in one mass, enclosing in its bulk the original piled staging and crib-work; the material being obtained from side cutting on the Panama side of the swamp. There is one merit however in the swamp part of the railway, which is that it is the only direct and straight part of the line; most of the rest being very circuitous, and laid out in a succession of serpentine curves, on precipitous sidelong ground.

The clearing of the railway from bush and jungle was attended with considerable risk, having to be done two or three times over during the progress of the works, the growth of vegetation being so prolific here. Now that the line is completed and opened, the clearing is still a work of some expense, and has to be done twice a year by negroes, or the course of the line would be grown up and invisible. In the first attempts at clearing away the jungle, the pestilential insects were an insufferable nuisance to the men; and frequently have they been driven from their work before a cloud of mosquitoes, sand-flies, garropatas and venomous tropical insects.

From the dismal swamp the railway winds its course tortuously, and in the shape of an almost succession of reversed curves, through the summit and all the way to Panama. These curves are reversed 4°, 6°, and 8°, (which is the American notation for curves of the respective radii of 1422, 955, and 716 feet), without straight line to ease the reversal, and not always with the outer rail elevated. The winding course of the line may be conceived of from the fact that the isthmus in a direct line is only about 30 miles wide, but the distance by railway from Colon to Panama Bay is 48 miles. The course is very ingeniously picked out in the vicinity of the summit, taking every available ravine and opening to its assistance; running sidelong on the banks of the Chagres river in dangerous proximity for miles, and turning at times to every conceivable point of the compass, giving the traveler occasional views of tropical luxuriance; taking awful twists and bends to avoid

cuttings of eight or ten feet in depth; and at last clearing the summit of the isthmus 10½ miles from Panama and the Pacific, with a cutting only averaging twenty feet in depth and 500 yards long. The greatest grades are sixty feet to a mile, the curves are any thing you like, and the maximum elevation to which the locomotive ascends is 263 feet above the mean tide level of the two seas. Before the railway was explored and constructed, the isthmus had been surveyed by various scientific individuals, who maintained that a less summit could not be found at Panama than about 400 or 500 feet above the sea. But railway engineers soon destroyed the hypothesis of learned explorers (who so often write about nature, but do not attack her,) and by a good deal of pluck and energy, and a small amount of science, brought the project to a practical issue.

The isthmus presents many picturesque tropical beauties between the Aspinwall swamp and Panama. There are the varieties of palm trees, more than twenty in number, with their clusters of scarlet berries; the cocoa nut tree with its graceful feathery branches; the gigantic flowering tropical lilies and cactus; the plantain, prickly pear, and gay flowering shrubs and creepers; and the impenetrable jungle or tropical thicket, clothing the ravines with a dense cover of vegetation, and giving to their undulations a gorgeous clothing.

The earthworks upon the railway are but trifling; there are no large cuttings (the largest being the summit one mentioned above,) and no very large banks. The bulk of the material for the banks was taken from patches of side cutting taken at the nearest and most convenient points, regardless alike of appearance or finish. Necessity was the order of the day, and style and order had to succumb. These slopes are not trimmed, or even formed at all like slopes, the cuttings being taken out vertically and allowed to form themselves, and they have formed themselves truly, with the assistance of the tropical rains, into very wild shapes. Nature, here so prolific, however, steps in frequently and clothes their deformities by a tropical covering of vegetation. The tops of the banks are shaved down in too many cases to a nicety, being not more than ten or twelve feet broad at the top, and cut into and guttered up severely by the tropical rains, for want of a proper sodding. Near the summit this deficiency of embankment gives the line a very dangerous look, and especially so where its slopes are washed by the Chagres river. Diversions of the line and sacrifice of good alignment are visible in some places where the work has been cut down to its minimum, and pushed through at any sacrifice.

The bridges which were first constructed upon the line were of the true wooden, temporary and American type, having a very stagy look about them, and not intended for inspection by posterity. They were in some cases nothing more than trestle work of the rudest description, and quite unsafe for trains of more than four or five miles per hour. These, however, thanks to the rapacities of a tropical climate, have gone the way of all that is perishable, and crumbled into dust and tropical mildew. Wrought iron boiler plate girder bridges, both for large and small spans, resting upon stone abutments, have been substituted. They are of the simplest character, and have a lean, skeleton appearance. Each bridge is only composed of two ordinary girders, placed directly under each rail, with nothing over them but the common cross-sleepers of irregular lengths, and the rails then

spiked to these. No planking, no parapets, (although the bridges are frequently placed on very ugly curves, and the train jumps as it mounts them,) and the bridges *in toto* resemble an ill-constructed gridiron. The masonry is bold, rough, and good, prepared from a blue granite and whitish freestone which are found on the line, in the execution of which negro labor, as in all other classes of work on the isthmus, is largely employed under white superintendence. These bridges have cost a heavy sum, as they have all been constructed on the wrecks of the old ones, since the opening of the line in 1854, and whilst the ordinary traffic has been going on. The iron bridge over the Chagres river, about half way across the isthmus, is the largest and most important work on the line; it has six openings of a hundred feet span each, spanned by as many pairs of boiler plate girders, arranged in this example to form the parapets, with small cross girders, and upon these last the longitudinal timbers are fixed to carry the rails. The whole, however, is left gridiron shape, without planking or finish. It is adapted for a single line only. The upper sides of main girders are curved, which gives to the upper lines of the bridge a wavy and unpleasing appearance.

The permanent way is of the roughest character; being laid and maintained by negro labor, its correctness as to line, level, and finish may be easily judged. The rails are, however, generally good, and of the bridge-rail section, weighing 68 lbs. to a yard. Some short distance of the line is laid with the common Yankee foot rail, or, as it is sometimes termed in England, the contractor's rail. The rails are fastened to the intermediate sleepers by common spikes weighing less than a pound each, and at the joints are secured very roughly by a small boiler plate chair (8 lbs. weight) and four spikes. This is the universal American system of fixing rails. The rails might, however, have been slotted at one end, through which two of the spikes pass and secure the rail to the chair, and prevent it from sliding. The bridge rails used here were evidently intended for longitudinal timbers; for there are the holes in the flanges for the screw bolts which secure the rails to the continuous timbers. The sleepers now used are of *lignum vitæ* wood, fetched from Carthagena on the Atlantic side of the isthmus, and cost, when delivered, 6s. each. The sleepers originally used (pine) on the line have wholly disappeared; they only lasted from two to three years. The *lignum vitæ* sleepers are reported to be of no longer duration than about twelve years. The ballast was omitted from the line almost entirely in its first formation, and now it is not universally used throughout, being put on in patches from time to time, where it is found to be all important to keep the permanent way from being washed out of position by the tropical rains. It is principally formed of broken rock and coarse gravel, both of which are plentiful on the line; it is used sparingly, however, the sleepers being generally on the soft material on their underside, with broken rock packed between.

The traveling on the railroad is very slow, averaging not more than ten or twelve miles per hour. The grades, however, are not excessive, not exceeding as above stated a maximum of 60 feet in a mile; but the locomotives are weak and ashmatic, and they frequently stick on these inclines with very ordinary trains, and the passengers sit under a broiling tropical sun at the bottom of a cutting, with only an inch board intervening between them and the sun, frequently for an hour to-

gether. This is not very pleasant when each passenger pays £5 3s. for the fare to cross the isthmus, and 6d. per pound for all his luggage over fifty pounds weight, which, with something like an ordinary amount of luggage, comes to about 2s. 6d. per mile per head. The black negro engine drivers too take a long time to pull up at an intermediate station, swinging backwards and forwards in its vicinity for about a quarter of an hour, like a pendulum of a clock. The locomotives and carriages are of United States build and fashion, only a shade worse. There is the bull-whistle to the locomotive, with its funny little wheels in front on a bogie frame, turning on a swivel-joint, and its broad-topped ugly funnel for wood burning. The carriages are common and dirty, with no double casing to the top to screen the intense heat of a tropical sun, Venetian slides for windows, and hard seats. The station-houses along the line are mere palm huts (excepting at Aspinwall and Panama,) and their vicinities have a wild, uncivilized appearance, with the black, nude negroes hovering about in all the crudities of uncivilized life.

At Panama, the terminus of the line on the Pacific side, the station has no conveniences of any kind for the travelers; no offices for washing, refreshment, and other purposes. The traveler from California to the United States often finds himself here in company with some 1,000 or 1,200 persons, just arrived by a Californian steamer, suffering from tropical disorders, and no means of comfort at hand, not even civility.

The total cost of the line has been about £27,000 per mile, and the engineer-in-chief from the commencement to the present time has been Colonel Totten, an American. The railway pays a dividend of 12 per cent. per annum, with its present undeveloped traffic.—*London Civ. Eng. and Arch. Journal.*

SOUTHERN PACIFIC RAILROAD

An adjourned meeting of the Cincinnati Stockholders in the Southern Pacific Railroad, was held in the Merchants' Exchange yesterday afternoon. Mr. Tait in the chair. The meeting was called for the purpose of hearing a report from Dr. Fowlkes, the President of the Company. That gentleman, being present, submitted his Report, which was read to the meeting by Col. Chas. S. Todd, as follows:

CINCINNATI, OHIO, May 23, 1859.

To the Stockholders of the S. P. R. R. Co. of Cincinnati:

The business and interests of the Company which I represent and in which you have stock, prevented my meeting you on Friday the 20th inst. While I should have been glad to have met you, according to appointment, yet circumstances prevented, which, I am pleased to say, have fully compensated the Company for my failure to meet you on that day.

Col. Chas. S. Todd, Vice President of the Company, who is well known to the people of this city for his integrity, chivalry and devotion to the advancement of the Company, however, met you on that day, and read a report made to the Stockholders of the Company at New Orleans, on the 29th of April, 1859, and which has since been presented to the Stockholders in public meetings, as well as through the Press, at almost every point. I am gratified to state it has been in every public meeting *unanimously* adopted and approved; not only as to the compromise and adjustment of existing difficulties with a rival Company, but

the policy to free the company from the embarrassments of debt and to relieve it of the dead-weight resting upon it, from a seemingly large stock liability; from extravagant and inordinate salaries and expenses; consuming the means and resources of the company, instead of being applied to the constructing of the road; by the dismissal of drones and the abolition of sinecure offices; and the contemplated provision for the speedy and rapid prosecution of the work, have all, separately and collectively, I feel proud to say, met with a cordial and hearty response by our stockholders—the press and the public, wherever I have presented and explained them, both *in and out* of Texas! They have received an unanimity of sanction far and much beyond our expectations. I do not know a *single* dissatisfied stockholder with the compromise and new policy of the company, in Louisiana, Arkansas, Mississippi, Alabama, Georgia, North Carolina, Virginia, Tennessee, Missouri or Kentucky. Nor do I know one, who refuses to adopt it and meet its spirit and its terms. There may be such—possibly there are—but if so, they are unknown to me, and to those who have most actively labored to make these terms, thereof, correctly understood, and to give the reasons that dictated each and every measure which has been adopted by the directors and stockholders of our company, of our attorneys, friends and public spirited citizens of Texas, for the relief and success of the enterprise. No measure has been adopted without profound reflection, nor without the sanction and approval not only of the great majority of the Directors of the Company, but of its attorneys and its intelligent friends and stockholders; all of which have been consulted as fully as was practicable under the circumstances which then surrounded our action.

After the failure of the compromise made in October, 1858, which was contemplated to be carried out in January, 1859, all the money raised for that occasion, was withdrawn from my possession and use except that of Kentucky, Alabama, Virginia and Tennessee; and scattered interior remittances, but while withdrawn from my use and control, much of it has been held by agents, etc., without disbursing it, awaiting the subsequent events likely to occur speedily in Texas, in the affairs of the company. After that failure, and so far as advised, it has no where been actually distributed in original hands, except in New Orleans; and since the last compromise, much of that has been repaid, and much contributed that was withheld in December last, and in the opinion of the agent, a greater amount will be advanced than was loaned in December and January. As fast as received there and elsewhere it is ordered to be remitted in bank checks upon New York or New Orleans, to D. C. Wilder, Secretary of the Company.

The paying stockholders of the Company are unwilling to protect those who fail, refuse or neglect to pay. This policy has been approved by every meeting of stockholders since I have been President of the Company. Those who have paid have done so with the express and unconditional understanding, that all should be made to pay upon their unpaid instalments, or make a loan of 50 cents per share, or make a surrender of stock of an amount deemed equivalent to the payment of moneys by others. This policy was inaugurated by the stockholders themselves; it has been since adopted by the Directors; it is founded on reason and justice; the laws of the State of Texas will enforce it with ease, certainty and directness; and being directed to execute it as the President of the Company,

and pledged to those who have paid, and to those who will pay, and otherwise meet the spirit and meaning of this policy, I shall as surely execute it, as I live. The laws remain unchanged in Texas, and God gives me reason and strength to continue to do my duty, amid the machinations of the wicked, or the threats of the silly, or the temptations of those who would allure me from rectitude and honor. I have sold stock on this policy, and under this assurance, and all who have paid or do now pay, are and will be protected; all who do not pay, and will not pay, will be "lopped off," as useless appendages of the enterprise; and the period fixed within which they must do so, terminates on the 10th June next. After that day, neither instalments nor loan can be received, and so every agent will be instructed. The necessity of this, must be apparent to all—at that date, we can see what amount of stock is really protected—the amount of money to be relied upon from stockholders; and, consequently, the DEFICIT which must be provided, to free the company of debt, by which, alone, can the work be successfully prosecuted. RAILROADS MUST HAVE CREDIT; as individuals, they must PAY, or they are not entitled to receive it. And even when they do pay, they have but little credit since the revulsion of 1857. But the past history of this company, forbids the possibility of its making the first step to the attainment of soundness and the enjoyment of public confidence, until provision be made for its entire indebtedness. Railroads can not be constructed without money. A company discredited and crushed, as this has been, by ERROR, and FOLLY, and WRONG, in the past management, can not progress without paying its debts—without exercising a rigid economy, vigorous industry, and practical skill. And if stockholders, now, decline to pay, they need not, and ought not, to utter a complaint, that their places be occupied by those who have money, with the disposition to now rescue the Road from "its wounds, bruises, and putrifying sores."

To wrangle and wrangle longer over its prostrate form, may amuse the idle, serve as food for the mischievous and ill-natured—but it can bring them neither honor nor profit. Our friends, *real* or *feigned*, have brought much, yea, most, of the difficulties, endangering this work, upon it—they have prolonged the controversy from which it is now being freed, and it is time that action should follow action, and deeds take the place of words. Nothing can be successful without merit—and nothing can be *useful*, but what is fair, candid and honest in business. He who otherwise calculates, is deceiving himself. Duplicity and double dealing never achieved an honorable victory. *Defeat* always overtakes these plans, scattering them to the four winds.

It has been stated *here*, and so I see it reported at a previous meeting, that two individuals held the power to control this Company by a stock vote; this statement is wholly incorrect. No two stockholders own stock enough to control its elections. There are no two who own above one-fourth of all the stock. *I am the largest stockholder*, and I expect still to purchase more than I now hold; if others want power, they can now acquire it by paying for it! The \$1,360,000 of stock which the Company proposes to sell, carries with it the absolute power to control the Company. I am authorized to sell it; and he or they who have the ability to pay for it, can now purchase it, and carry with it the INCIDENT of POWER. Are there any here who wish to increase his or their power; he or they have only to pay for

it? Any who desire to control the Company, he or they can now secure it by furnishing what the Company needs—that is, money to pay its debts, and progress with the work. MONEY IS POWER. Whose privilege is it, with the disposition to thus use it in the meeting? He who has neither the ability to pay for the power, nor the disposition to purchase it, is a graceless complainer, and to silence such, I have no surrenders of position, place or rights, which belong to myself, to promise him; he is without reason or justice in his complaints, and is entitled to neither the respect nor the sympathy of men of business, or of the usages of life, to justify his grumbling; as well might he rail at his neighbor for his larger possessions, or the indulgences which belong to success, because he, forsooth, is not so favored by fortune.

Again, complaints have been made, I learn, of my contracts and my transactions; such complaints are founded in ignorance of facts, or they originate from improper motives. At the Stockholders meeting in Texas, in January, 1859, I called their attention to this subject. I asked a committee to fully investigate my transactions and contracts, placing every contract, in part or in whole, which I had made with the company, at the disposal of that convention of stockholders, a committee was appointed, and a report made, exempting every transaction of mine with the Company, of a material nature, from censure or complaint; adding that it was doubtful whether my contracts were not advantageous to the best interests of the Company, and the committee advised that I might, or might not, adhere to and execute any contract which then existed between myself and the Company. So much for this subject.

The stockholders here hold, I think mostly the stock upon which *instalments* are due and unpaid; and although all the stock of 4 per cent. and less credited thereon, has long since been sold and purchased in by the Company, yet the opportunity has *always* been given the parties to redeem their stock. All who now pay before the 10th day of June, will still be allowed to pay, and stand protected as others; while all who do not, ought not to feel aggrieved or utter a complaint, by being, from and after that date, excluded as stockholders.

We desire, sincerely, to see every creditor paid, and every stockholder protected—so do associate stockholders; but the necessities of the company, and fidelity and good faith to paying stockholders, leave me not a choice in the matter, but they *fix* upon me a duty which I must, and which I shall execute firmly, without fear or affection. "Justice to all favoritism to none," shall govern me in the inflexible discharge of duties yet remaining to be performed by me, as the chief executive officer of the Company.

In conclusion, we have to say, we shall be glad to see every stockholder protected; all must accept the same conditions and meet the like requirements. While we sincerely desire to see all here protected, yet candor compels me to say, that neither the money of the Cincinnati stockholders, nor their influence are held indispensable to the relief of the Company, or the success of the enterprise; yet both are desirable and important and we earnestly invite their co-operation and assistance. All must have equal advantages and bear equal burdens. He who expects more will be disappointed. He who hopes to avoid a proper share of burdens, is deceiving himself.

J. FOWLKES, President.

The Secretary of the meeting, Mr. John

MacCracken, then, on motion, read a Report from Messrs. Tait, Conwell, and Johnson, recommending that a committee of three be appointed by the stockholders of Louisville, New Orleans and Cincinnati—one from each place, to investigate all contracts heretofore made by the company, and ratify such as they find have been made in good faith.

Mr. Conwell remarked, that as there would be considerable discussion, he would offer a resolution, that each speaker would be limited to half an hour.

Dr. Fowlkes took the floor, and commenced his remarks by regretting that the resolutions just read had been offered. Was it supposed by the gentlemen composing this meeting, or any other meeting, or set of men in this broad land, that he would make statements that could not be substantiated by the records? At an official meeting in Texas, he had asked and obtained a committee to investigate all his transactions with the company. The committee had performed their duty, and had reported favorably to himself. Go to headquarters, if you want facts. Don't credit all the silly rumors that are floating about. Falsehood upon falsehood has been put forth. I have been dragged up here to explain contracts I have made with the company. I will here remark that every such transaction of mine is open to the fullest investigation. I have never sought one of them. The agents of the company, long before I had any official connection with it, sought me out, and solicited me to invest in the road. I refused repeatedly, until being greatly importuned, I accepted the propositions offered me. I have had four business transactions with the Southern Pacific Railroad Company, and I defy any man to prove that they were not legitimate. Reference has been made, I understand, to two men holding stock sufficient to control the action of the company. I will settle that matter. Mr. Post, I suppose, is one of the persons referred to; I am undoubtedly the other. Mr. Post is the owner of \$30,000 worth of the stock; he has paid for it, and it rightfully belongs to him; he certainly has the right to vote accordingly. I am the rightful owner of a still larger amount of the stock; but both of us together do not own sufficient to control the affairs of the company. Gentlemen, however, in all parts of the country, owning stock, have, unsolicited by me, sent me their proxies, and I have voted according to their instructions. But all this talk of controlling, etc., is silly. Any gentleman in this meeting, if he has the means, has the chance of increasing his power. Money is power. Mr. Conwell, your Agent, I understand, has said a good many hard things about me. I would ask that gentleman a question or two. Did you not, Sir, in Texas, propose to me that you would worm yourself into the confidence of the opposing faction, learn their plans, and then betray them? And did you not, Sir, afterwards, seek to play double with both of the companies, by striving to organize still another company, and thereby supersede and render null the actions of both the old and the new company? I know you, sir, and stand prepared to show you up in your true colors.

(Here Mr. Conwell arose to his feet and made towards Dr. Fowlkes, asking him in a loud voice whether he meant to insult him. The Dr. disclaimed any such idea—he merely wished to state facts. The gentlemen stood in a manacng attitude towards each other for a few moments. Mr. Westcott then walked towards Mr. Conwell and led him him to his

seat. We expected momentarily to hear the crack of revolvers, and prudently dodged behind a desk.)

The President hoped the gentlemen would confine themselves to the subject before the meeting, and cease to deal in personalities.

Dr. Fowlkes then concluded his remarks about the wants of the road—the necessity of accepting the plan offered, etc.

Mr. Conwell took the floor, and explained his connection with the Company. He disclaimed any idea of acting the double part toward either branch. He was appointed Agent by the Cincinnati Stockholders, to proceed to New Orleans and Texas and look after their interests. He accepted the trust, and had endeavored to do his duty in the premises. He had investigated matters, and was not satisfied with the stock transactions of Dr. Fowlkes. That gentleman had bought \$450,000 of stock for \$250,000. I conceived that the Dr. had received at least \$50,000 more than he was entitled to. He objected to persons controlling the acts of the Company by proxies, and stock acquired in the manner Dr. Fowlkes had acquired his. The Dr. charges me with duplicity, that I have been secretly organizing another company to supercede both the others. I deny having done or sought any such thing, and challenge the proof. If there has been any wrong committed, the resolutions now under consideration, if adopted, would discover it. There are, without doubt, many contracts that need looking into, and if they are found to be illegal, they should be repudiated. You have all heard of Gen. Richardson, of Memphis. I met him at Louisville. He was appointed to draw up resolutions for the meeting. At New Orleans, also, he was very active. I had my suspicions about the man. At New Orleans I was shown \$100,000 of Gen. Richardson's paper, given for a large amount of stock in the road. I suspected there was something wrong about this transaction. I knew that gentleman was not worth the money. I felt sure the transaction was a fraudulent one—a blind to some bold scheme.

Dr. Fowlkes again took the floor, and replied in an excited manner to Mr. Conwell's remarks about Gen. Richardson. That gentleman is my neighbor; he is a man of wealth—worth a great deal more than \$100,000. Gen. Richardson was as far above Mr. Conwell as a mountain is above a mole-hill—morally, socially—he could buy up forty such men as you are. I again charge you, sir, (looking at Mr. Conwell,) with being a double dealer, and a man not to be trusted.

(Here another exciting scene occurred. Mr. Conwell jumped to his feet, and approached Dr. Fowlkes in a menacing manner, the Doctor stepping back as Mr. Conwell advanced. Peace was, however, again restored, and both gentlemen took their seats.)

Mr. Johnson regretted the course the discussion had taken—it had consisted of personalities throughout. Certain resolutions were before the meeting, and he hoped they would be considered. Let the committee be appointed. None need fear their investigations. If all is right, he had no doubt all the money the Company wanted, could be raised in this city. Let all be united. It was a great enterprise—let it be carried out. We only wanted confidence. He hoped Dr. Fowlkes would be the first to bury the hatchet. If he had any thing to say against the resolutions, he would like to hear from him.

Dr. Fowlkes said: he affairs of the Company could not be clogged at this time with investigations—there was money to raise. He had

to go to New York, to Petersburg, Va., and to half a dozen of other States, and raise means to carry on the work. It didn't matter about the Cincinnati stockholders—the road could be built without them. I have power in the Company rightfully and legally acquired, and I mean to increase that power until I can secure my interests. Here, gentlemen, is a man (turning to the Vice President of the Company, Col. Charles S. Todd, well and favorably known in this city as a veteran of the war of 1812, aid-de-camp to Gen. Harrison) who, at a critical moment, protected your interests and saved the road from sale. He it is who should receive the thanks of the stockholders. And turning to Mr. Westcott, there is a man who, when I was here before, took me aside and asked me to give him advantages over his brother stockholders.

Here Mr. Westcott got the floor, and charged Dr. Fowlkes with being the cause of the difficulties of the Company—there had been \$4,000,000 bogus stock issued—where is the money received for that?

Dr. Fowlkes replied that the N. O. books would show. But you, sir, (pointing at Mr. Westcott) stand here branded as a rogue.

Mr. Westcott—And you, sir, are a d—d rascal.

The President called the gentlemen to order. For a few moments there was a considerable confusion.

After order was restored,

Dr. Newton asked to say a few words. Much had been said that ought not to have been said. The resolutions were before the meeting, and they alone should be considered. He did not believe Dr. Fowlkes had acquired one share of his stock wrongfully. He was opposed to the resolutions. They would do great harm at this juncture. We must pay up our stock or lose all.

Here, question was loudly called, and after some desultory conversation, the President of the meeting put it to vote, and the resolutions were lost.

At half-past 7 o'clock the meeting adjourned.

Thus ended the second Pacific Railroad Meeting, without results of any kind.—*Gaz.*

RAILROAD COMMUNICATION WITH THE NORTH.

—We learn from the Holly Springs (Miss.) *Herald* that the gap in the Mississippi Central Railroad to be filled, in order to give us uninterrupted railroad communication with the North, is sixty-seven miles; and that a contract has been entered into with parties to fill the said gap by or before the 1st of December next. The *Herald* says:

"The contractors, we learn, are not only men of energy, but have ample means at command to comply with the contract they have entered into, and we may now speak with certainty of the date at which our readers may expect to see through trains moving from New Orleans to Jackson, Tenn. The contractors will immediately put a large force on the road, and it would not surprise us to hear that they could and would complete their contract some weeks before the 1st of December next, as the Directors made it to their interest to do the work as early as possible.

When this road is completed, the travel and transportation of produce to New Orleans will be immensely increased; and Memphis may look out for her laurels."

This is indeed good news. By the first of next year, then, at furthest, no unforeseen accident preventing, the passenger may step into the cars at the Depot near Callopie street, and proceed by rail to the utmost extremities of the Union in the East or West.—*Bulletin.*

MONETARY AND COMMERCIAL.

The supply of capital during the week past, has been equally balanced by a moderate demand for money; regular houses taking nearly all the acceptable offerings of short paper at 10 @ 12 per cent.

Eastern Exchange remains without change, the supply and demand being about equal. We give the following quotations:

	BUYING.	SELLING.
New York Sight.....	35@40 prem.	40@41 prem.
Boston.....	33 prem.	34@35 prem.
Philadelphia.....	37@40 prem.	40@41 prem.
Baltimore.....	33 prem.	34@35 prem.
New Orleans.....	par.	40@41 prem.
American Gold.....	25@30 prem.	40@50 do.

The following is a comparative statement of the imports of foreign Dry Goods and general merchandise for the past week, and since January 1:

	1857.	1858.	1859.
Dry Goods.....	\$657,732	\$762,144	\$1,846,737
General Merchandise.....	3,511,024	1,942,822	3,134,317

Total for the week.....	\$4,169,655	\$2,704,966	\$4,981,054
Previously reported.....	87,624,259	43,677,019	89,275,017

Since January 1.\$91,794,914 46,382,805 94,256,071

With regard to American stocks, in Europe, Satterthwaite, by the Canada, says:

During the past week our Stock Exchange has been in a state of extreme gloom; liquidation and narrowing engagements have been the chief things thought of. Stock has been thrown on the hands of the dealers to a large extent, which the investing public gradually absorb. Consols close 90½ to 4 for money, being 1 per cent. higher than the quotation a week ago. The Bank has raised the rate of discount to 4½ per cent., which, as a prudential measure, is regarded with satisfaction. People here are beginning to be accustomed to war news from Piedmont, and confidence is gaining ground, that at present, if not altogether, England will remain neutral. Since our last the necessities of many parties have compelled sales of American securities, and though no very important business has been done, quotations are much reduced, as buyers refuse taking them except at a decline. New York Central shares have been done at 65, the 6 per cent. bonds at 77, and the 7 per cent. bonds at 87. Illinois Central shares are steady, at 44 and 43 dis., but Construction bonds have given way to 69 on forced sales, believed to be from Amsterdam. Free Lands are steady at about 80. The important advance in wheat here will undoubtedly tend to enrich the Western Districts of America, and increase the railroad receipts; and although for a time, prices of the stocks may be low, we look for an increase of net profits on all American railroads.

AMERICAN SECURITIES IN THE LONDON MARKET—MAY 11.

Illinois Central 6 per cent., 1875.....	66 @ 70
Illinois 7 per cent., 1875.....	66 @ 70
Illinois 7 per cent., Freehold, 1880.....	70 @ 85
Illinois \$100 shares, \$60 paid (dis.).....	47 @ 45
Mich. Cen. 1st Mort. Con. 8 per cent., 1869.....	80 @ 85
Michigan Central do., 1869.....	80 @ 85
Michigan Central do., (Sink. Fund) do 1882.....	80 @ 85
Michigan Central \$100 Shares.....	40 @ 50
Michigan S. & N. Ind. 7 per cent. Sink. Fund, 1885, (x. c.).....	60 @ 64
N. Y. Cent. 6 per cent. Sink. Fund, 1883.....	78 @ 80
N. Y. Cent. 7 per cent., Convertible, 1864.....	78 @ 80
N. Y. Cent. 7 per cent., (sink. fund) 1876.....	85 @ 90
N. Y. Cent. 7 per cent. \$100 Shares.....	63 @ 68
Erie Third Mortgage Bonds, 7 per cent., 1883.....	58 @ 60
Erie Railroad do., \$100 Shares.....	5 @ 8
Penn. Central Bonds, First Mortgage, Con., 6 per cent.....	88 @ 90
Penn. Central do. 2d Mort. 6 per cent. stg.....	87 @ 90
Phil. and Reading Bs. 6 per cent., 1880.....	80 @ 85
Phil. & Reading 6 per cent., 1870.....	70 @ 75
Phil. and Reading \$50 shares.....	20 @ 24

The New York Courier of Monday says, the Stock Market, though steady in the morning, gave way in the afternoon and closed heavily. The heavy shipments of specie weighs upon prices.

SALES AT THE NEW YORK STOCK EXCHANGE.—MAY 21.

\$10,000 Missouri State 6's.....	s60 82½
10,000 do.....	s10 83½
26,000 do.....	84½
7,000 do.....	s30 83
5,000 do.....	b10 83½
100,000 United States 5's, 1874.....	114
2,000 California State 7's, Bonds.....	82½
12,000 Erie R. R. 3d Mt. Bonds 7's.....	63
250 Hud. River R. R.....	97
1,500 Ills. Cent. R. R. Bds.....	78½
1375 Shares N. Y. Central R. R.....	72½
33 " Harlem R. R.....	11½
100 " Harlem R. R. Pref.....	3½
50 " Panama R. R.....	s60 116½

The Erie Road in April earned \$177,000 less than last year. The decrease in passenger receipts was \$10,000, and in freight \$167,000. The falling off in the Central is much larger than has been looked for.

The telegraphic report of the April earnings on the Rock Island Road states them at.....\$72,319 (¢)

Same report, April, 1858.....85,739 71

Decrease.....\$13,420 62

BOSTON, CONCORD AND MONTREAL R. R.—It will be recollected that this railroad corporation failed to meet its engagements some year and a half ago, and went into the hands of trustees. Arrangements were immediately set on foot to liquidate the floating debt, which amounted to about \$250,000. Under the energetic management of a committee of the stockholders, a considerable sum was raised by the issue of new bonds, which had been authorized by the Legislature, and with the proceeds the creditors of the road were paid, partly in cash and partly in bonds. The floating debt which caused the embarrassment of the road has now been entirely paid or funded, and the whole property of the corporation was, on Thursday last, retransferred by the trustees to the Board of Directors, by whom the road will hereafter again be managed in behalf of the stockholders. The whole debt of the road is now funded, with the exception of about \$70,000, (which amount of a recent award for damages) which is to be liquidated in easy annual payments. The whole funded debt is but little over \$1,000,000, and its property is worth \$2,000,000. The net earnings, with a continuance of prudent management, will exceed \$100,000 per year—an amount amply sufficient to pay the interest on the debt, to meet all other engagements, including the amount annually set aside for a sinking fund, and still leave a surplus for the stockholders. The road has never failed to pay the interest on its bonds, which are now one of the best securities of the kind now in the market. They are in request at improving prices, and as provision has been made for their ultimate liquidation by a sinking fund, they are actually worth, for investment, their par value. Condholders and owners of preferred stock will do well to hold on to their investments.—*Boston Journal.*

TO THE LADIES.



THE BOUDOIR Double Thread Sewing Machine.

THE BEST AND CHEAPEST

Double-thread Sewing Machine ever offered in the Cincinnati Market.

This Machine possesses advantages over any thing now in use.
Office in Melodeon Building, corner Fourth and Walnut, up stairs.

Agents Wanted in the West and South.
Send for Circular. Address,

W. E. Braman & Co.

My. 19.

Commencing April 11, 1859.

LITTLE MIAMI —AND— COLUMBUS AND XENIA RAILROAD.

FOUR TRAINS DAILY.

Three Through Express Trains.

FIRST TRAIN—No. 1 Express, at 6 A. M., connects via Columbus and Cleveland; via Columbus, Crestline, and Pittsburg; Detroit via Cleveland and Steamers. This train stops between Cincinnati and Columbus, at Loveland, Deerfield, Morrow, Xenia, Cedarville, South Charleston, London, and West Jefferson.

SECOND TRAIN—No. 2 Express, at 8 A. M., connects via Columbus, Bellair, and Benwood; Wheeling, via Columbus, Steubenville, and Pittsburg; via Columbus, Crestline, and Pittsburg; via Columbus and Cleveland; Detroit, via Cleveland and Steamer; Springfield. This train stops between Cincinnati and Columbus at Plainville, Milford, Loveland, Morrow, Spring Valley, Xenia and London.

THIRD TRAIN—Accommodation, at 4:40 P. M., for Columbus and Springfield.

FOURTH TRAIN—Night Express, at 11:30 P. M.; connects via Columbus, Bellair, and Benwood; Wheeling; via Columbus, Steubenville and Pittsburg; via Columbus, Crestline and Pittsburg; via Columbus and Cleveland. This train stops at Loveland, Morrow, Corwin, Xenia and London. *Sleeping Cars on this Train.*

IF No. 1 Express through to Cleveland without change.

The Night Express Train, leaving Cincinnati at 11:30 P. M., runs daily, except Saturdays. The other trains run daily, except Sundays.

For all information and Through Tickets to Boston, New York, Philadelphia, Baltimore, Washington, Buffalo, Niagara Falls, Dunkirk, Cleveland, Pittsburg, Wheeling, and all Eastern places, please apply at the offices, Walnut Street House, No. 1 Burnet House, south-east corner of Broadway and Front Streets, and at the Eastern Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Superintendent.

Omnibuses call for passengers by leaving directions at the Ticket Office.

BALTIMORE AND OHIO RAILROAD.

GREAT NATIONAL ROUTE.

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the West, South-West and North-West.

Fare to New York and Boston ONE DOLLAR less than via any other route.

TWO TRAINS

Leave Wheeling daily at 8:05 P. M., and 11:30 A. M. Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City. Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2. Quick time and sure connections.

IF Inquire for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

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MIDDLETON, STROBRIDGE & CO.,
Jan 8 1y 119 Walnut st., Odd Fellows' Building

April 11, 1859.

Cincinnati, Hamilton and Dayton, RAILROAD.

**FOUR TRAINS
LEAVE THE SIXTH STREET DEPOT DAILY.**

TRAINS RUN THROUGH TO RICHMOND, LIMA, SANDUSKY, AND DELAWARE WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND NORTH-WESTERN CITIES.

6 A. M. EXPRESS TRAIN—For Cleveland and Pittsburg, via Delaware, makes close connection at Crestline for Pittsburg, Baltimore, Philadelphia and New York; and at Cleveland for Dunkirk, Buffalo, Boston and New York. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Munice. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

S. A. M. MAIL TRAIN—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STEAMER FOR DETROIT; at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at DELAWARE with the C., C. and C. Road, for Cleveland and points East.

4:30 P. M. TRAIN—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Connects, also, at Dayton for Troy, Piqua, Sidney, Lima and Chicago. Also connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago.

6 P. M. TRAIN—For Dayton and all way stations. For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; No. 3 Burnet House; or at the Sixth Street Depot.

D. McLAREN, Superintendent.

New Time Table

OF THE

NEW YORK CENTRAL R. R.

	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp.	7 00 A. M.	7 00 P. M.	7 00 P. M.
Mail	9 00 A. M.	12 50 A. M.	
New York Exp.	11 15 A. M.	9 00 P. M.	9 00 P. M.
Night Exp.	5 00 P. M.	4 00 A. M.	4 00 A. M.
Utica Accom'n.	6 00 P. M.	Ar. U. 10 00 P. M.	
N. Y. Mail	11 15 P. M.	10 00 A. M.	10 00 A. M.
	Leave Buffalo.	Leave Bridge.	Arr. Albany.
New York Exp.	5 15 A. M.	5 15 A. M.	3 30 P. M.
Steamboat Exp.	8 00 A. M.	8 00 A. M.	8 00 P. M.
Mail			2 30 P. M.
Cleveland Exp.	6 00 P. M.	6 00 P. M.	4 40 A. M.
Cincinnati Exp.	11 00 P. M.	11 00 P. M.	8 30 A. M.
Utica Accom'n.			10 00 A. M.

AMERICAN AND FOREIGN PATENT AGENT.

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SOLICITOR OF PATENTS,
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1000 TONS Railroad Iron, weighing about lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by
March 15th. VOSE, LIVINGSTON & CO.,
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RAILROAD IRON.

The undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, at shipping ports in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON & CO.

New York, Ap 3, 1859. 9 South William Street.

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SEWING MACHINES.

W. M. SUMNER & CO., cor. Fourth and Walnut Streets, second floor, Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky., Columbus, O.,
Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, low-priced FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being ALIVE ON BOTH SIDES, impossible to ravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions, free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

Send or call for a circular, containing all particulars, prices, testimonials, etc.
WM. SUMNER & CO.

1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th.
Corby, Gossin & Co.'s make, for sale very low by
TRABER & AUBERY,
7 Public Landing

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Wines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary and portable engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.
Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair, Ohio Mechanics' Institute. June 18, 1855—J.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Booksellers, Country merchants, Teachers, and others to our extensive stock of School, Classical, Theological, Scientific, Standard, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the leading publishers, the principal manufacturers of Paper and Stationery, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

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Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, Envelope, Manilla, and Tea wrap-boards, Envelopes, Gold and steel Pens, Penholders, Copying Books, Ink and surs, Sealing Slates, Mucilage, Book rests, Bill head boxes, Envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files: Date Calendars, together with all other articles used in the counting-house.

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To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly paged, including all sizes, from the small memorandum to the large Super Royal and Imperial bound in a great variety of styles workmanship. order of any description, with or without and warranted to be in quality of printing and durability of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

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CHICAGO,
Great Western and North-Western
ROUTE.INDIANAPOLIS & CINCINNATI
SHORT LINE

RAILROAD.

(VIA LAWRENCEBURG.)

Distance 110 Miles and No Change of Cars Between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS LEAVE CINCINNATI daily, (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6 A. M.—Chicago and Terre Haute Day Express—Through to Terre Haute, Lafayette, and Chicago, with but one change of cars.

SECOND TRAIN, 4:15 P. M.—Accommodation—The 4:15 P. M. train arrives in Indianapolis at 10:10 P. M.

THIRD TRAIN—Chicago and Terre Haute Night Express—8 P. M.—Arrives at Indianapolis at 1 A. M. This train runs through from Cincinnati to Chicago, with but one change of cars.

The above trains make close connections at

Indianapolis, Lafayette and Chicago,

WITH TRAINS FOR

Terre Haute,	Lafayette,
Springfield,	Jacksonville,
Rock Island,	Danville,
Galesburg,	Burlington,
Kenosha,	Milwaukee,
Mattoon,	Pana,
Naples,	Peoria,
Galena,	Dunleith,
Quincy,	Racine,
Prairie du Chien,	Decatur,
Bloomington,	Joliet,
Lusale,	St. Paul,

And all towns and cities in the North-west.

Connections are also made at Indianapolis with the Peru and Indianapolis Railroad for Kokomo, Peru, Logansport, Fort Wayne, Toledo and Detroit.

Be sure you are in the right Ticket Office before you purchase your ticket, and ask for tickets

Via Lawrenceburg & Indianapolis.

THROUGH TICKETS.

Good until used. may be had at the Company's Offices, north-west corner Broadway and Front Streets, under Spencer House.

A. HAMILTON, Ticket Agent.
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W. M. STARK, Ticket Agent.

Also at the Walnut Street House.
J. S. SHACKELFORD, Ticket Agent.
And at the Depot, where all necessary information can be had.
H. C. LORD, President.
W. H. L. NOBLE, General Ticket Agent.

Commencing April 10, 1859.

OHIO & MISSISSIPPI



RAILROAD.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCENT, Cairo, and St. Louis, at 8:30 A. M., and 8:30 P. M.

Accommodation train at 5 P. M.; for Evansville at 8:30 P. M.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 8:30 P. M.

RETURNING.—FAST LINE.—Leaves East St. Louis, (Sunday excepted) at 7 A. M., arriving at Cincinnati at 10:10 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 2:40 P. M., arriving at Cincinnati at 7 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the offices: Walnut Street House, bet. Sixth and Seventh Streets, No. 1 Burnet House, corner office; north-west corner of Front and Broadway; Spencer House Office; and at the Depot, corner of Front and Mill Streets.

P. W. STRADER, General Ticket Agent.
Omnibuses call for Passengers.

GENERAL RAILWAY SUPPLY AGENCY. SNOOK & HILL'S PATENT LOCOMOTIVE LAMPS.

83 Liberty Street, Cor. of Broadway,
NEW YORK.

JOHN W. KELLY
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

RAILROAD ENGINES & CARS,

ALSO AGENT FOR THE SALE OF

HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,

JUDSON'S GOVERNOR VALVE.

Orders solicited and promptly filled.

PROSSER'S PATENT

ORIGINAL LAP-WELDED

IRON AND STEEL BOILER TUBES,
SAFE FROM END TO END.

PARIS' PATENT

ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

SOLE IMPORTERS.

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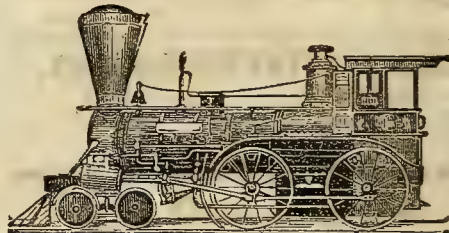
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President of the Board

Jan. 5.1f.

The Railroad Record.

E. D. MANSFIELD,
T. WRIGHTSON, } Editors.

CINCINNATI:
Thursday Morning, June 2, 1859.

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TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies the advertising pages of the *Record*.

MILWAUKEE and MINNESOTA RAILROAD CO.—The old La Crosse and Milwaukee Railroad has, with its change of management, changed its name as above, and will hereafter be managed by a new Board of Directors. We believe the Board is made up of men who will redeem the road from the bad odor it has of late been in. As an earnest of its good intentions and responsibility, they have made arrangements to liberally provide for the farm mortgagors, and pay the interest on the farm mortgages, sold long since by the old company. We look upon this line as the best in the State. It runs through a good country, and taps the Mississippi at a very important point, La Crosse. It will always be the great route for both northwestern travel and freight, and properly managed, will pay a fair, if not a handsome dividend. With the old name has passed away, we trust, the bad odor so long associated with it, and now look forward to an altogether different state of things—*Milwaukee News*.

POPULATION OF IOWA.—The *Iowa State Reporter* estimates the present population of Iowa, at not less than 800,000, and thinks the next census will show fully one million.

EXPLORATIONS CONNECTED WITH THE PACIFIC RAILROAD.

The United States Government have made numerous explorations connected with the Pacific Railroad, are still continuing them, so far as can be done, connected with the ordinary Topographical Department. This will be useful, whether necessary to the railroad or not. The following is a brief note of some things which have been done.

1. MAP.—Lieut. Warren, of the Topographical Engineers, has prepared a map of the whole country covered by the Explorations. It is made on a scale of 1 to 3,000,000, including the country, so far as surveyed, between 26° and 49° Northern Latitude and 90° and 122° Western Longitude. In its construction, not only the results of the Pacific Railroad Exploring Expedition and that of the Mexican Boundary Commission, but all the earlier investigations, including those of Lewis, and Clarke, and Long, and many of recent date have been collected and employed.

2. CAPTAIN HUMPHREY'S REPORT.—In addition to other matters, this report contains the following interesting information:

1. The experiment of sinking artesian wells on the public lands has been prosecuted by Captain Pope so far as to demonstrate that with any reasonable amount of expenditure, artesian wells on the Llano Estacado, and plains of similar formation and position, are impracticable. A well was sunk to the depth of a one thousand and fifty feet; beyond that depth it could not be carried. Apprehensions are even entertained as to whether the water would flow at the surface, if the boring were carried to the depth originally intended.

2. The field work of the exploration of the Rio Colorado of the West has been completed, and the report and maps are now in preparation. The river was ascended by steamboat to a point nearly 500 miles from its mouth (lat. 36° 06'), beyond which it was impracticable to proceed in boats. The ascent occupied about seventy days, but is said to be practicable in ten or twenty days by steamboats of suitable construction and two feet draft. The head of navigation is 220 miles from the first Mormon settlement in the Great Lake Basin, and 500 miles from the Great Salt Lake.

3. The explorations recommended for the next season are the examination of the interior of Nebraska, especially the sources of the Yellowstone; the region along the San Juan to its junction with the Rio Colorado of the West, and along the Spanish trail from that river to Abiqui; the route across the Sierra Nevada to Carson's river to ascertain its railroad practicability and the upper Columbia river to ascertain its navigability.

The *impracticability* of Artesian Wells is an important fact, as connected with the Southern Pacific Railroad. In our former arguments on this subject, it was assumed, that water could be obtained in this manner upon the Llano Estacado. It is not, however, insurmountable. The whole distance of this plain is about 200 miles; a distance which can be traversed by rail cars in eight hours; and for temporary supplies of water, tanks can be made, supplied with rain water.

3. EXPLORATIONS OF NEBRASKA.—This re-

port is by Lieut. Warren, and contains a part of observations made in three expeditions; the first in 1855, the second in 1856, and the third in 1857. The last was when he undertook to determine the best route for continuing the Military road between Mendota and Big Sioux, westward to Fort Laramie and the South Pass, thence northward examining the Black Hills. This is accompanied by a map, embracing all the country from the 94th to 106th meridian, between the 38th and 50th parallels. In its north-east corner is the Lake of the Woods. In the south-east Fort Leavenworth. In the south-west Pikes Peak, and in the north-west the upper waters of the Missouri.

We quote the following general remarks in respect to the physical geography of Nebraska:

Leaving out of consideration for the present the smaller detached mountain masses, and beginning with the main range of the Rocky mountains, on the 49th parallel, we find their eastern base to have a direction nearly north-west and south-east, and the range crossing the Missouri at "The Gate of the Mountains." Continuing south-east it crosses the Yellowstone near where Captain Clark reached that river in 1806, (latitude 46,) just south of which it forms high, snow-covered peaks. This line of mountains is broken through again by the Big Horn River, and the mountains receive the name of Big Horn mountains. The south-east terminus of the Big Horn mountains sinks into the elevated table land prairie, and the range perhaps reappears again as the Laramie mountains. (South of the latitude of Fort Laramie the line of the eastern front of the mountains is nearly north and south.)

The Black Hills, whose geographical position we have determined, are the most eastern portion of what has heretofore been considered a part of the great mountain region west of the Mississippi; and it is worthy of note that, if a line be drawn from them to the Little Rocky Mountains, on the 48th parallel, which are the most eastern portion in that latitude, this line will be parallel to the line of the main front of the mountains which I have already traced. What is still more significant is, that if a straight line be drawn from the mouth of the Yellowstone to the mouth of the Kansas river, it will also be parallel to the lines before mentioned, and will have about an equal portion of the Missouri on each side of it.

The line of the east base of the main mountain mass is the highest, of course, of any portion of the plains, and at Raw Hide Peak, near Fort Laramie, is about 5,500 feet elevation, as determined by the horizontally stratified tertiary deposits, though owing to great denudation the average height there of this line of the plains will not be so great. The same line, near the 49th parallel, has probably a somewhat less elevation. The lowest line of the plains is that along the Missouri, and its elevation, taken near Bijou Hills, (a point about on the perpendicular to it from Fort Laramie,) is about 2,130 feet, which does not differ materially from its height at the mouth of the Yellowstone. The slope of all this part of the plains (being in a direction perpendicular to the lines of equal elevation) has, therefore its line of greatest descent in a north-east direction, and north of the Niobrara; this is the direction in which a majority of the rivers flow till they join with the Missouri or Yellowstone. To the south of the Niobrara the

greatest slope of the plains is to the south-east, towards the Gulf of Mexico, and this is the direction pursued there by nearly all the rivers of the plains. Thus the Niobrara would seem, as it were, to run along a swell or ridge on the surface. The average slope of the plains from the Missouri to the mountains make nowhere an angle with the horizon greater than one-half degree.

These surveys are very interesting, and we hope the Government will continue them, till all the unexplored parts of our country are surveyed.

To establish the scientific relations of the geography of a country is one of the most important things connected with the development of its resources. In some of the oldest and most civilized countries, this has not been done till recently. In our country, so vast and so full of wealth, it should be done now, and continued, that the new settler and the builder of towns and factories should know precisely what to expect. In this place, we may also add, that the labors and services of the Topographical corps are, in the highest degree, valuable.

THE N. Y. CENTRAL RAILROAD.

The United States *Economist* considers this road in a bad way, and says the road continually divides dividends, but divides them out of its capital. This may be so; but we have not its annual reports, by us, to determine the facts. The Company however say (or rather its managers,) that there is so much real net revenue actually made; and if so, the Company has a perfect right to divide it, as dividends. There are, however, two historical facts connected with the New York Central, which are rather singular. Our readers will recollect, that what is called the New York Central Company was formed by the consolidation of seven local companies, whose respective roads extended from Albany to Buffalo. Several of these roads, such as the Utica and Schenectady (80 miles,) made large profits, and divided large dividends. The holders of their stock were paid premiums, in order to bring the whole road to an equilibrium, in point of value. At that time, these roads, as a whole, were profitable. Since then, the road has never been so valuable. It is true that the Company made about one hundred miles of new road, and combined with some short pieces, making their whole length of road now 507 miles. Notwithstanding, however, the profits of the Company have fallen off.

But, again, the Stock and Debts of the Company have been increasing from year to year, ever since. The Company seems never to have had the sense or talent since, to mind its own business. The result is, it must not only be quarreling, but constantly entering into new contracts, new constructions, and new competition, in order to preserve its own business. Is not this altogether unwise? Will any amount of effort prevent the *New York and Erie*, or the *Pennsylvania Central*, from

enjoying the business which properly belongs to them? Why is not the Central content with its own? Of necessity, the business of the New York Central must be immense. The whole basin of the lakes lies before it, and can not be deprived of the advantage this immense commerce gives them. Would it not be just as well for the New York Central to be content with its own business, and cultivate its own affairs? So it looks, to us, at a distance.

The *Economist* gives the following figures, which, we presume, are correct:

When the last report appeared, four of the best accountants in Wall street labored over it separately and collectively for a long time, and the only result obtained was the following, which is compared with the return of the same items for 1854:

	1854.	1858.
Length of road... miles	556	556
Capital paid in.....	\$23,067,415	\$24,182,400 00
Funded debt.....	11,947,121	14,402,634 69
Bills payable.....	78,600	454,274 21
Assets.....	35,093,136	39,039,308 09
Road and equipment.....	28,533,913	30,732,517 54
Stocks of companies.....		763,230 00
Fuel, etc.....	2,111,101	1,360,938 92
Bills receivable.....		83,484 75
	30,645,014	33,440,635 14
Deficit.....	4,438,122	5,598,673 77

If the balance sheet in the report is examined no such deficit will be found. It shows that over \$8,000,000 have been lost and spent by the company, and the balance is covered by estimating the profits of 25 years to come at \$8,193,000 and putting them down as present assets.

If this be so, it is certainly a very curious result.

The *Economist* asserts, that the road has been borrowing money all the while to pay dividends. This is so grave a charge, that we should suppose the managers of the Company would feel themselves obliged to present a clear statement, and show in what manner the money was found to pay dividends. It is perfectly certain, however, that if any railroad company has paid \$1,000,000 in dividends, and at the same time has increased its debt to that amount, it has borrowed the money. Now, if an entirely new piece of road has been made, it may be perfectly true that the road has made the dividend, and the increased debt should be charged to a new road. But, we believe the *New York Central* has made no new road for several years. How, then, has it increased its debts, unless the money was borrowed for its expenses, in order to pay dividends. It is incumbent on the Central to explain these matters. Perhaps it can be done. We think the *Economist* has stated the matter too strongly. The construction account has run as follows, since the consolidation when the road was all completed:

	Construction.	Increase.	Dividends paid.	Gross Earnings.
1853....	\$23,029,000			
1854....	25,908,374	2,879,374	1,919,564	5,918,334
1855....	24,523,913	2,610,539	1,919,564	6,563,581
1856....	29,787,372	1,262,459	1,919,564	7,707,348
1857....	30,511,815	729,443	1,919,554	8,027,251
1858....	30,732,517	216,502	1,919,564	6,528,412
Total increase.....		\$7,695,317	9,537,826	34,744,926

In five years the debt of the Company has increased \$7,500,000; but, the Company has distributed \$9,500,000 among its stockholders. In those five years, the Company has received \$42,000,000; a most enormous sum. Was it wise to increase its debt, with such receipts? The New York Central may be redeemed and made an exceedingly profitable property; but it must be done in a different way from this. There must be a system of economy and prudence adopted, which does not seem to have existed heretofore. Its very strength has been its weakness, by encouraging a reckless and extravagant expenditure.

LETTER FROM W. WRIGHTSON.

SANTA RITA, ARIZ., May 6, 1859.

T. WRIGHTSON, Esq.,

Dear Sir:—Since my last communication to you, we have been very busily engaged in pushing forward the various works of the Company, at its different mining locations and at the Hacienda and Rancho. It is, perhaps, a misfortune that we are compelled to divide our attention among so many different objects, but as they are all those of high importance to the Company, I have decided to do the best I could at each of them, and push forward most rapidly the most important. In this matter you may rest assured that we shall concentrate our efforts as much as practicable with the secure possession of the mining fields we now hold.

At the Salero, which I place first, because of the extent of the old workings and its reputed richness in former times, we have been pushing the work on the shaft, and have now attained a depth of over forty feet. The walls are good and solid, and we think need no further timbering at present. The vein is very distinct and regular. A few feet above where we are now, it had what miners term a pinch—that is, the metal become very narrow—but it is widening again. The rock in this shaft is very hard, and much of it has to be blasted off with powder. We are not yet below the old work, and, therefore, shall start no frontons from the shaft yet.

In the fronton from the old work we find the rock very hard. The vein, however, is good. I have sent some of it for assay to Mr. Ehrenberg, and will give you the result as early as I can. We have had one gang here, and have only gained two varas in the past two weeks. One great advantage we expect to derive from this fronton is, that as it runs directly into the mountain, we acquire depth very rapidly, and if theories are correct, the deeper the metal the better it is. At the lower opening mentioned in a former letter, we were induced to extend our working farther to the east, and have now struck what we consider the mother vein. At least, so far as we can see, all the smaller veins in the opening run into this one, and form a large, clear, and distinct vein. We are now some ten or twelve

feet deep in this shaft, and think we shall soon have good metal. The metal of this mine, as before reported, is amalgamation ore, and can only be treated successfully by this method. We propose to adopt the patio process, as being the cheapest and best adapted to this country. The house of the Major Domo here is finished, except the doors, and is now occupied. The peon houses are nearly up, and we are sinking a well to secure water. This mine alone, with its adjacent veins, would be an ample field for the operations of a single company. But I can see no reason in this for neglecting other fields in our immediate neighborhood, and which give promise of abundant return.

The Crystal Mine—which I reported to you in my last, has now been sunk to the depth of ten varas (yards,) and a little further, and we have begun frontons in both directions on the vein. We have here an abundance of metal, and have already laid at the mouth of the mine, and at the Hacienda, some four tons of clear ore. In addition to this, we have done considerable work on the road from the mine to the Hacienda, and have made a tolerable road for pack mules.

At the Mina Eucarnacion we have had one gang of hands at work, and I have the pleasure to report very favorable results. The old opening was at the very highest point on the vein, and for that reason the worst that could have been selected. But as our object in working here was merely to secure the legal ownership by sinking a shaft ten varas deep. I directed the miners to clean out the old work and sink farther. They are now eight varas deep, and have taken out about a quarter of a ton of very good ore, some of which forms a very good flux for the metal of the Crystal Mine. If this continues to yield this kind of ore, we shall work this mine permanently, and commence shafts lower down the mountain, and in places more accessible than the present one.

At the Mina Obispo or Bishop's Mine, we have also had one gang at work, and have cleaned out the second shaft to the depth of about twelve feet. This shaft was nearly twenty feet in length at the surface, and bears evidence of having been filled up by design. The grape once growing at its mouth was an unusual thing to find in this country, and on our rocky mountain slopes. We have not yet got to the bottom of the old work, but have found some very fine specimens of sulphuret of silver. This will undoubtedly be an important vein and the richness of the ores has made us very anxious to secure it permanently.

You will see from the above report, that we have now nearly done work enough on all the different veins to give us legal ownership to many distinct fields of enterprise, which were not contemplated in the original formation of the company, but which now belongs to us by the work already done and improvements made, according to the existing laws on the

subject of Mining in this country. We shall soon be able to concentrate our efforts on one or two of these fields, and thus produce better results in that particular spot than we are now doing. In the meanwhile we will do the best possible with the number of men that we have, and the different fields that we are developing.

At the Mission we have been continuing the works already reported, and our prospects are fair for a crop of corn, barley and garden vegetables as well as grapes. One advantage that this mission will be to us is, to furnish us with what we can not buy—garden vegetables, and these are as well a necessity as a luxury.

While the works above reported have been going forward at the mines—we have been erecting a furnace and vasa, for smelting the ores of the Crystal Mine. We have also made three thousand adobes for the erection of suitable shops and buildings, have laid the foundation for the carpenter shop, and have cut some forty cords of wood for charcoal. The commencement of a system for the treatment of the ores of our smelting mines, is a work of great importance, and should not be begun hastily nor trivially. With this view of things I took especial care to secure the best Mexican Smelter in this section of country, and after showing him the ore of the mine, and satisfying myself that he understood the process of smelting it, directed him to put up such a furnace and vasa as would reduce the ore. I also gave him what materials he needed and all the necessary peons. He commenced two weeks ago last Monday, and true to his promise, on Thursday of this week was ready to smelt. A Mexican fundicion or furnace is a large and yet a very small affair. It consists of a solid wall of adobes, six varas in length, and one vasa and half in width, by about three and a half varas in height. In the center of this imposing pile is left a small space, ten inches square, and in height from within two feet of the base up to the top. The front of this is closed by adobes placed on their ends. The bellows is placed behind the whole, and the melted material flows out in front. This forms the fundicion. The metal is first broken into small fragments, then mixed with flux, such as litharge or lead ores of various kinds. The furnace is, in the meanwhile, made very hot, and the metal put in, in small charges. As it melts, the metal and slag together run down, and are drawn off at the top hole. The metal is run into planchas of alloy. In the Crystal Mine, the alloys in the planchas consist of lead, silver, iron and a little zinc, perhaps. The slag is afterwards run over again with fresh ore. The vasa resembles a reverberatory furnace in form. Its bed is filled with ashes properly prepared to form a cupel. This is made very hot, and the planchas of metal are then put in, and a current of air made to blow over them. This oxydizes the lead, while the other

metals are absorbed in the cupel. The lead flows off in the shape of litharge, and the silver remains as a plancha in the bottom of the cupel. And when slightly cooled, is taken out.

On Thursday we began operations at the furnace, and by evening our smelter thought it was hot enough to begin smelting. I thought not, but as he understood the business and I did not, I let him have his own way. The furnace, however, was green and cold, and he found that he had begun too soon. However he ran out ore plancha before stopping. The next day he cleaned out the furnace, and again put up the front, but as this was Friday and we needed more flux than we had, he ran out only a small plancha. In the evening, I requested him to try the ore in the vasa, and accordingly we lighted the fires. By morning of Saturday he was ready to put in ore, and I confess I was much better pleased with the success of this experiment, than I had anticipated that I would be. The ore melted readily, and the slag which flowed off was evidently either entirely or very nearly free from metal. Before noon he began to refine what he had smelted, and by two o'clock he gave me the plancha of silver which I send to you. It weighs eight ounces, and is the result of about one hundred and fifty pounds of ore. I have had it marked the first plancha, and the date May 7, 1859. I can not tell you the anxiety with which we have all watched the result of this undertaking. When I first saw the mines, I was satisfied that the ore was there, and that we could get it out readily and cheaply with the labor of the country. The number of the mines and the variety and abundance of the ores, could not be otherwise than satisfactory. But it is one thing to have ore—however good it may be, and quite another thing to extract the silver out of it. It is one thing to have the raw material as nature formed it in her grand laboratory, and a far different thing to refine that material which nature furnishes, and to extract from it the pure and shining metal which, by common consent of all nations, forms the standard of value. And so, although we knew we had rich ores and those which would amply repay the labor bestowed on them, although we were satisfied that our mines were valuable ones from their fame throughout Sonora, arising from the results of former workings, and from the assays of the ores made by ourselves, by the engineers of the Sonora Exploring and Mining Company, and by various scientific men of well known ability—yet we felt a very natural desire to see for ourselves the silver flowing from the ore, and to know that we could produce a result for our labor. The success of our first attempt was highly gratifying and gives promise for the future.

In selecting the ores of the Crystal Mine as those upon which to make our first attempt at reducing the metals, we were aware that they are by no means the richest ores that we have. The assays of this ore show sixty dollars per

ton, while those of the Bustillo show five hundred, and those of some of the other mines show a much larger sum. But we were induced to commence here from the fact that the ores of this mine were very abundant, full as rich, indeed richer than the majority of the mines in Mexico out of which the most enormous fortunes have been made, and with all easy to reduce, and uniform in character. And in addition to this, we hope to derive from them the fluxes necessary to reduce the richer ores of the Bustillo and other mines.

The success of our vasa in reducing this ore, satisfies me, that the modern reverberatory furnace can be introduced here and successfully used in the reduction of silver ore. In fact, the vasa of the Mexicans is but a reverberatory furnace, built in a rude way, and on a small scale. We shall, however, waste nothing in idle experiment, and shall proceed only by slow steps, but sure ones, towards improvement on the customs of the country.

On the occasion of sending you the first plancha of silver produced by our company, it is not amiss to indulge in a few reminiscences. One year ago to-morrow morning, Mr. Grosvenor and Mr. Way took the early train of cars to leave Cincinnati, for the purpose of occupying these mines. Four months ago, lacking four days, the train of the company, with the tools and outfit, arrived at Santa Rita. We have, therefore, produced a result, virtually, within four months of the commencement of actual operations at the mines, and if we deduct the time spent in cleaning out the old works on the mines, in a much shorter time. And this, too, under circumstances not the most encouraging. This is better than has been done by any other company here and is highly gratifying to all of us who are here, and, I trust, will be equally satisfactory to the company.

With many wishes for the early arrival of the time when I can report to you that the company is self-sustaining,

I am, Dear Sir,
Truly Yours,
W. WRIGHTSON.

PENNSYLVANIA INQUIRER ON FILLIBUSTERING.

We were somewhat amused while looking over an article in the above named mammoth sheet of May 27, on the subject of Fillibustering in Sonora and Arizona, and while we as unequivocally condemn the supineness of our government in failing to suppress organized bands of robbers, whether composed of white men or Indians, and meeting out to them the just deserts of banditti, we confess that there would be an opportunity afforded for the same advantages to flow from a Fillibustering expedition into Sonora, that the New York *Herald* claims will be the result of the European War, namely the spread of Education and a better knowledge of Geography. This

is desirable, but we think the cost too great; we would, therefore, advise our respectable and venerable cotemporary that *Arizona* is mainly composed of that "worthless tract" of land known as the "Gadsden Purchase," for which they have in most unmeasured terms abused the Government for paying Santa Anna \$10,000,000. Hence it will be seen that the arduous duties and terrible "ordeal" pointed out by the following paragraph to the Arizonians to enable them to get under the shadow of our wing, are all works of supererogation. Indeed, we are inclined to believe "our grandmother" of the *Inquirer* has failed to wipe her spectacles lately, and should not be at all surprised to next hear her advocate the nomination of the ghost of Nicholas Biddle for President.

The Arizonians, in particular, are favorable to annexation, but they repudiate all desire to coalesce with Walker and his band of outlaws. In a fair, open, and honorable manner, they are willing to engage in efforts to come under the government of the United States, but prior to doing so they are not disposed to undergo the ordeal of bloodshed and robbery which must be expected at the hands of a crew so lawless as that which Walker would introduce, if possible, to Arizona.

THE SPECIE DRAIN.

In the last two weeks *eight millions* in specie have left New York for Europe. In the last two months *eighteen millions* have gone. This is at the rate of one hundred and eight millions in a year. The country could not stand this. But it is assumed that the drain will diminish. We see, too, that the West is relied on for specie. If this be so, it will prove a broken reed; for, the West has not as much specie as it needs. There is an immense demand in the new States now for gold to sustain the new Banking Institutions, constantly arising. Besides this, the enlarged business of the West requires more coin for general use. The fact is not to be disguised, that the financial state of the country is becoming again complicated, and if the state of things now existent continues, there must be another period of commercial embarrassment. The U. S. *Economist* has the following, which gives a pretty correct view of things:

The demand for money at the West to remit to New York is, however, very great. The State of Missouri has been compelled to borrow of the Boatmen's and State Savings Banks \$450,000, at 6 per cent. for two years, to pay the interest due in New York on State bonds loaned to defaulting railroads. The State issued these 6 per cent. bonds at 97, and paid one per cent. premium for exchange on New York. The drain of money which has set in from every part of the country to New York is causing the rates to rise in all directions, and the result of this will soon be reflected upon this market. The exports of specie from the port of New York for the month of May are \$12,343,592, without checking the rate of interest, and the receipts are \$1,480,000 May 7, and \$2,920,270 May 26, making \$3,400,270, or a net export of \$9,000,-

000, of which \$1,500,000 has come from the Treasury. The Treasury has now again become a borrower instead of a resource. The advices from abroad are of a still more urgent demand for money, and the utmost efforts are being used here to lull the public mind, for fear that a rise in the value of money will destroy the facilities for getting gold too soon. For this reason, the leading shippers sell bills and lend the money at call freely until the packet goes. A check in the facility of selling bills would involve a calling in of all such call loans to remit at once. The remitter of specie may sell \$1,000,000 of bills at say 104, and lend the money "at call." The proceeds of another \$1,000,000 may be remitted with the packet that carries the bills, and held there 60 days before the bills are due, by which time other millions got on a similar credit come forward, and an immense kiting operation sustained. This appears now to be the case to some extent, all parties being very desirous to hold a large cash balance under the hand, in face of the war disturbances.

CONDUCTOR GIFFORD.

A writer in the New York *Courier and Enquirer* pays the following merited tribute to the unfortunate and lamented Conductor, GIFFORD:

Dying in his duty, this faithful servant of a perilous trust has received funeral honors. His companions in the old Order whose foundation is in the misty antiquity, with full ranks and regalia, with their curious customs, each emblem used in which has a meaning of old time, and is in itself historical, have taken up the wounded and crushed form of their brother, and given it solemn and impressive sepulture.

Had he been a soldier and died at the head of his company, had he been a mariner and gone down with his wreck, the men who catch the sunbeam of the popular judgment on their pen before they use it, would have composed the chapter of his eulogy. And yet, what did he each day but expose to all the dangers he knew so well in all their power, his life in the quiet, earnest, methodised duty of watching over the conducting over the iron way of the tens of thousands of human beings who found their way to all the peaceable pursuits of life.

Mr. GIFFORD was a name so well known on the great highway of travel that it had almost ceased to represent a mortal, it was a part of the Road. In all the vicissitudes of these journeys, their progress to the safety of an understood system out of all the dangerous and doubtful in experimenting, he had been of the foremost, and men forgot to ask for him, they expected the name of GIFFORD as associated with their journey.

When that train which had left the Genesee in the morning to reach the Bay of New York before the hour of night was on its intense speed, wheels circling faster than the eye could determine, and the great drivers devouring distance, the position of Mr. GLENN at the bar of the locomotive seemed the most perilous. They who saw the familiar face of the conductor as he, with his characteristic gentleness and silence of step, traversed the cars, would not have exchanged the comfort and security for the deck of the engine, and yet the roll of the one was safety, the other crushed out life and limb. It is the duty of the journalist to give to eulogy the name of those who meet the fate that awaits us all in the shape that is sculptured of courage and fidelity.

The conductor of a railway train has respon-

sibilities which are to be met with the judgment that is born of the instant. The danger gives faint warning. He must know by that summoning of all the thought which it is only in the power of the few to do, just what the duty of the moment requires. When he is the man of courage and firmness, and has proved it by long years of service, it is not for the record to give the incident of his fate a naked narrative. These are brave men. They take to the promotion of the safety and happiness of their race, the qualities which, used by the soldier in his fellow being's destruction, plaits the red laurel, and for this man dying under the wheels of his car, the funeral word deserve to be as well that of gratitude as eulogy. SENTINEL.

PACIFIC RAILROAD.

Speech of the Hon. Jefferson Davis, of Mississippi, on the Pacific Railroad Bill, delivered in the Senate of the United States, January, 1859.

(CONTINUED.)

Let us now turn to the subject of the arid region. The Senator has omitted to read to us from the Secretary's report, the part showing the aridity and desert character of some portion of the country crossed by the thirty-second parallel, as though that was a matter which had never been presented to the country in connection with the explorations of this route. He reads from the testimony on which the report was made; and in that report, so brief that surely before criticism it might have been read—he would find these facts stated in the same manner in which he has quoted them. He would have found it thus stated in that document:

"From the report of Captain Pope, it would appear that the belt of fertile land which lies on the west side of the Mississippi throughout its length extends on this route nearly to the head waters of the Colorado, of Texas, in about longitude 102 deg.—that is about three degrees further west than on the more northern routes. The evidence adduced in support of this opinion is not, however, conclusive."

Speculative meteorology would render this probable, but so guarded was this report in relation to every route, that here, in speaking of the thirty second parallel, it is said that the statement of Captain Pope, that fertility on that region extended to the one hundred and second meridian, is not conclusive, though he had many opportunities for observation.

"The evidence adduced in support of this opinion is not, however, conclusive; and, until it is rendered more complete, the fertile soil must be considered in this, as in other latitudes, to terminate about the ninety-ninth meridian.—Thence to the Pacific slopes the route is over uncultivable soil, though generally grassed, the exceptions being, as on the route of the thirty-fifth parallel, in portions of the valleys of the Pecos, Rio Grande, Gila, and Colorado of the West. The table lands and mountain slopes are usually well covered with gramma-grass, and in New Mexico have supported immense herds of cattle. There are exceptions to this, however, on the greater portion of the Llano Estacado, on portions of the plains between the Rio Grande and the Gila; and (comprised in that space) from Tucson to the Gila, eighty miles, there is no grass on the route traveled, nor is it to be found on the Lower Gila valley."

The very thing which the Senator explored the report of Lieutenant Michler to find, and read as matter which had been drawn from some recess and never presented by the Department.

"Occasional patches of bunch grass only being found on the plain, and a species of gramma-grass sometimes upon the mountain sides. No grass is found on the Colorado desert, one hundred and thirty-five miles along the line of location."

"The length of the route through this generally uncultivable soil is twelve hundred and ten miles. Upon descending from the summit of the San Geronimo Pass, on the route to San Pedro, the soil is fertile, and either well watered or can be irrigated."

Here, again, all speculation is omitted as to what might be obtained by using that which the ancient Hebrews used as the fertilizer of soil—water—to convert the sterile plain which

is spoken of, on the west side of the Colorado, into land of the highest productiveness. By merely tapping the Colorado river and turning the water out on that so called sandy plain which is here described as a desert, I believe California may command an agricultural region, which, acre for acre, will be equal to any upon the banks of the Nile; but at this and all other points of speculation, things not determined by an actual existing state of facts, and brought home as results of explorations, were excluded from the report.

The Senator further says, that we have expended \$10,000,000 in buying a territory in order to construct this railroad. I surely thought we had much higher objects, and think we have gained a great deal more. I think we have purchased a country, the value of which is only now beginning to be realized by the public generally; that we have acquired land peculiarly adapted to the production of those articles which will be most profitable in the trade with Asia; that we have acquired a portion of the best mining region Spain possessed when she held the mineral lands of this continent; a region where silver is in its richest deposits, by the working of which we shall be able, whenever we get the means of transporting it from its location, to equalize the currency of the world between the gold and silver coin employed. I think these are great advantages. They will contribute to the building of the road, but we might well have acquired that territory, even if a railroad should never be constructed.

Again, the Senator says: "We got camels to traverse this arid desert." This arid desert? where? That vast plain on the route of the forty-ninth parallel covered with sage, is the very desert which nothing but the camel can ever profitably pass over. It is the largest desert I know of in the United States where no grass can be found. But it was not on account of railroads that those camels were purchased by the Government. The subject was agitated before a railroad across the continent was presented to the minds of Congress. I do not recollect the date, but when I was formerly a member of this body, many years ago, I introduced a proposition to purchase camels for the purposes of army transportation. It went on from year to year, gaining favor, until at last Congress most wisely passed a law appropriating a small sum of money to import the camel and make the experiment, to see whether or not it would be fitted, in our climate and country, for purposes of army transportation—army transportation anywhere, everywhere. I regret exceedingly that these camels were not consolidated and sent up to Fort Leavenworth, to be used in the transportation to Utah, where I think they would have exhibited their value to the country in a higher degree, perhaps, than we shall have an opportunity hereafter to show.

The Senator attributes to me the desire to secure a southern location for the interoceanic railroad on grounds of sectional advantage. I am confident that this location would be adopted by contractors who invested their own money in the enterprise; but that is a geographical opinion, not a political hope. It has been constantly assumed that the South are most eager, for sectional purposes and advantages, to get the road diverted to the thirty-second parallel. As a southern man I have no such views. I believe that, if the railroad were built southward from the terminus proposed in the bill, to cross the continent on that parallel, it would bring with it those hordes of "carpet-bag men," who are dangerous to the slave population of the country with which they are mingled. I prefer the

more slowly progressing and more stable population that would come over wagon roads. In a sectional point of view, it may well be doubted whether the South has any reason to wish for a railroad connecting the northern territories with those near to the thirty-second parallel. Believing that the necessities of the Government require a railroad to connect the Atlantic and Pacific States, I desire to see one built. Yet I do not believe that it can be done upon any other line than that from the western border of Texas to the eastern border of California, for any sum the United States is likely to give, and the only reason for believing that the substitute I have offered will make such connection, is, that Texas projects a road across her own domain as far as the Rio Grande. That is my reason for believing that the end sought may be attained there, but not elsewhere.

The mines that will be intersected by that line of road are immensely valuable. The silver mines, if they are as rich as described, will attract thither a large population; and the supplies for laborers in those mines, as well as the transportation across the continent, will give to the road some probability of making a fair return to those who construct it; but these inducements will scarcely lead to its construction without aid, and it is because of this, together with the necessity of the Government, and therefore only, that I have ever been willing to give one dollar toward the construction of a railroad to the Pacific.

I now proceed to consider some of the peculiarities of the different routes proposed for the road; and to present some of the authorities which justify the conclusion heretofore announced by me when Secretary of War.—Foreseeing how much I should be embarrassed in this discussion by the labor of speaking, I have prepared some notes upon these lines with a view to their comparison.

I will first present some views in relation to the route near the forty-ninth parallel, being extracts from the Office Examinations, from the report of Captain McClellan, of Governor Stevens, of Geologist Gibbs, and of Lieutenant Abbot. Some of these have been made since the report sent to Congress by myself; but, instead of shaking my confidence in the conclusions which I then reached, they have served to confirm it. Difficulties which I supposed not to be insurmountable, have, by subsequent examinations, proved to be so. For instance, in that report it appeared that after reaching the Columbia river, the descent along the plain of that river would be easy. Recently a gentleman connected with the missions established on the Columbia river, in conversing with me in relation to that country, informed me that instead of the mountains sloping gently down to the river, so as to favor the construction of a railroad near the Dalles and Cascades, they rise precipitously, forming channels which seem to have been the result of volcanic action. The river tears by these rocky cliffs, that almost overhang it, with such velocity as to render the navigation exceedingly dangerous, and, at some places, impossible. The mountains are composed of basalt that is hard to cut, but which crumbles rapidly by exposure to the air, so as to be liable to slide and block the road. I derive the same information from other sources. It appears that the settlers have not been able to get a wagon road down the river bank from the Dalles to Fort Vancouver; but that they are compelled to use a very bad pack trail, which winds along the faces of precipices, on ledges so narrow that animals are sometimes precipitated to the bottom and killed. An appropriation made by Congress to make a wagon road

from Fort Vancouver to Fort Dalles, was expended upon a short portage at the Cascades; the road proving impracticable without enormous expense. Therefore, I say, so far from finding the route less difficult, the difficulty has been magnified, and we are thrown back to the consideration of whether those passes where the snow accumulates twenty feet deep, and which were declared to be impracticable on account of the length of the tunnels to be cut, do not at last afford the only route by which we can reach the Pacific on that parallel of latitude.

I wish particularly, however, to call the attention of the Senate, on account of remarks which have been made here, to the character of the soil in this region of country. It will be remembered that the geologist, Dr. Evans, had not made his report at the time of sending in the preliminary report in which my opinion was presented. It was then said in the Official review:

"Previous geological examinations over portions as far west as about longitude 101 or 102 deg., show that the uncultivable region begins in about the same longitude on this route as in the latitude of the Arkansas.

"From the geological information respecting the region between the meridian of 101 deg., and the Spokane Plain, imparted recently by Dr. Evans, from the report of Mr. Gibbs upon the section west of the Spokane, and after a close examination of the reports, the following general conclusions have been arrived at respecting the soil of the region traversed by the northern route."

"The river bottoms, in part, (where the soils of the different strata become mixed,) and the valleys among the mountains, form exceptions to this general condition of sterility. As, for instance, it is Lieutenant Ponelson's opinion, that, upon the Missouri, the soil is such that the settlements might be continuous upon its banks up to the mouth of the L'eau-qui-court river, longitude 98 deg.; from that point to Fort Union, about one-fourth could be settled. 'Above Fort Union,' Lieutenant Grover says, 'on the lower portion of the river, (between Fort Benton and Fort Union,) there are many bottoms, well adapted to agricultural purposes. There is a good deal of arable land, also, in the vicinity of Fort Benton, and in the Sun river valley.' The proportion of cultivable bottom lands on this section of the river is much less than one-fourth."

"It has been assumed that these valleys are all arable, and they have been so treated generally. This shows the fallacy of that assumption. Then, after crossing the Cascades:

"From the main cascade chain, the generally sterile soil extends eastward over the dry region until the rain that falls upon the Cœur d'Alene, Bitter Root, and other mountains, begins to be felt; we then have grazing. The soil improves in quality as the mountains are approached, the valleys of which are represented as fertile, perhaps influenced in some degree by the nature of the mountain debris that have been washed upon them. The Columbia river and its affluents, in their lower courses within the limits above mentioned, are stated to carry gravel and sand, but no fertilizing matter."

All the valleys in this region on which reliance was placed, are sometimes overflowed by the Columbia.

"Lieutenant Mullan says of the St. Mary's valley, which has been considered as a kind of standard, 'the soil of the valley of the Bitter Root (St. Mary's) is fertile and productive, well timbered with pine and cotton-wood, but whose chief characteristic and capability, is that of grazing large herds of cattle, and affording excellent mill sites along the numerous mountain streams.'"

"Dr. Suckley, referring to the Hell Gate, Bitter Root, Clark, and Columbia rivers, and to the Dalles, says: 'there are a few pieces of excellent land along those rivers. The valley of Clark's Fork is heavily timbered with pine; there is no grass.'"

"Within the limits of Washington Territory, between the Cascade and Rocky Mountains, there are seven thousand three hundred and fifty-six Indians. Within the same Territory, west of the Cascades, the areas being as three to one about, there are six thousand nine hundred and three Indians. This may give some indication as to the capabilities of the soil for supporting animal life."

I will next read a general statement of the amount of cultivable land from St. Paul to Seattle:

"So that of the two thousand and twenty-five miles from St. Paul to Seattle, on Puget Sound, we have only a space of about five hundred and thirty-five miles of fertile country; the remaining fourteen hundred and ninety miles being over uncultivable prairie soil, or mountain land, producing only lumber, with the limited exception of occasional river-bottoms, mountain valleys, or prairie."

This is the region which we have been told, in the course of this debate, is of such extreme fertility that men could build a road through it from the sale of the lands alone,

I will next give some extracts from the report of Captain McClellan, who examined the western section of this route:

"The Yakima unites with the Columbia in a vast sage desert, extending to the north and northeast as far as the eye can reach; and the desolate, dark gray color of the sage is unbroken by the verdure of grass or trees. The Columbia is here about four hundred yards in width, with sand and gravel banks thirty feet in height; a placid current; here and there a cluster of willow bushes border the stream, usually destitute of vegetation. In the Yakima, at its mouth, are three islands covered with good grass—all that is to be found in the vicinity. Neither stone nor timber occurs in the neighborhood. The valley of the Yakima soon becomes more contracted by low hills, which gradually close upon it, and soon increase in height as the stream is ascended. To the commencement of the pine timber, a distance of nearly one hundred miles from the mouth, the average width of the valley is about six miles, occasionally reduced to four or five hundred yards by spurs closing in on both sides, and sometimes widening out to ten miles. Cotton-wood and willow fringe the stream; grass is generally confined to the water's edge, but is not in sufficient quantity to adapt the valley to grazing purposes on a large scale. In some of the small lateral valleys good bunch grass is found, as well as on the summits of the highest ridges of hills. But the winters are too severe for cattle to thrive in the open air, the whole country being covered with snow; and, in addition, the bunch grass is of too scanty growth to be cut for hay. During the winter the Indians drive their horses and cattle to the most sheltered spots, where they feed on wild sage and willow."

"As far up as Ketetas, the wild sage covers the valley in all parts a little back from the water. The general character of the soil is sandiness, or exceeding lightness, occasionally gravelly, or covered with loose stones. It might in many places answer well for small grains, when compared with the greater part of the territory. By reference to the mass, it will be observed that Mr. Gibbs returned from the mouth of the Yakima to Wenatchee by a trail to the north of the river valley. From the point where he left the Yakima, his trail passes through a wide valley for some twenty-four miles; this valley is somewhat undulating, and is very barren, being almost entirely destitute of grass, having no timber; but one little pool of water, sixteen miles after leaving the Yakima, and that brackish; it is covered with the usual growth of sage."

He goes on to describe the country on the east side of the Cascade region, proves it to be a desert, irreclaimably a desert; and so it continues, according to all these reports, until you reach the region where this great plain of sterility is covered by the debris from the mountains, washed down upon little valleys, and where, by its elevation, it begins to catch some of that moisture which passes over the Pacific ocean. There, for the first time, a spot is reached which can be cultivated without irrigation. The rest is a desert. And here, in general connection, I may say that this extends from the Cascade mountains eastward up to the elevations of the Rocky Mountains, southward across the Snake river, and westward over the valley of the Des Chutes, with here and there a little spot where the washing of a mountain has deposited some soil on the sterile surface that lies beneath it, and where the moisture rolling down in little streams which serve to irrigate such spots, will render it possible for agricultural man to reside. Beyond that, it is a mere grazing country; and whenever we meet these descriptions of bunch grass and gramma grass, rely upon it Senators, it is not a proof that the region is fit for cultivation. On the contrary it may be remarked that these grasses are the usual attendant of that aridity of climate which forbids the hope of successful agriculture. To show how utterly hopeless it is to expect anything from this country, I will read a few lines more from Captain McClellan's report. He says:

"The Indians are harmless and peaceable; with the exception of the Yakimas, they are very poor. Their food consists of salmon, berries, and potatoes. The entire absence of game renders it difficult for them to obtain good clothing; during the whole trip I did not see a single deer, elk, or bear; nothing larger than a wolf. Wolves, badgers, squirrels, and a few gray marmots, were the only quadrupeds."

Next, sir, I come to the geological description furnished by Governor Stevens, of part of this desert region:

"From the range called the Snake river divide, the whole character of the country is completely changed. Here the geological formation is basaltic and volcanic, principally. None of the numerous streams and rivulets flowing from the mountains, along the route we traveled, emptied into

the Snake River, but either sunk into the ground or formed small lakes in the broad valley of the Snake river. The ground in most places, is formed principally of sand; and where large beds of basalt are not found, the ground is of a dry, absorbing nature, through which the water sinks, at times bursting out again. It was somewhat singular, that for sixty miles above Fort Hall, along the main stream of Snake river, we did not cross but one tributary, and that coming in from the south, while none came in from the north; all of the streams, as before mentioned, either forming lakes or sinking into the ground."

He goes on:

"It extends for many miles in length and breadth, forming an immense ocean of prairie, whose sameness is only broken by the 'Three Buttes' of the valley, which rise like islands in the sea, in this broad and barren area. Its whole character might be included in the word sterility."

This is Governor Stevens's own account. The Senator could not find the desert there, but found it on the line of the thirty-second parallel. Again, Governor Stevens says:

"From the mountains bounding the Snake river valley on the north to Fort Hall, a traveled distance of one hundred and twelve miles, there is but one spot of fertile ground that could be converted to any useful purpose, and this is found at Cantonment Loring, five miles above Fort Hall."

Then again, under the head of "topography of the route from the Missouri to the Columbia," he says:

"The great plain of the Columbia, or plateau of Spokane, as it has been called, is bounded on the north by those rivers, on the west by the former, and on the south and east by the Blue and Rocky Mountains; it is about two hundred by one hundred and fifty miles in its greatest length and breadth and presents such a curious variety of surface, that it has been alternately called a barren sage plain, rocky plateau, sterile waste, and sandy desert."

And he goes on to describe it, and shows that it deserves either one of these appellations. Such is the description of this land of rare fertility, where a teeming population is to maintain the road, according to the argument of the Senator from Massachusetts; such the report of the men who explored it, and who perhaps as much, if not more than those on any other line, were interested in giving it its most favorable complexion. Whether in Governor Stevens's subsequent report, which, I regret to say, Congress has failed to print, there is additional information expanding the region of fertility, I do not know. It was not sent in at the time these reports were furnished to Congress. The report of the geologist, Mr. Gibbs, I will refer to next. He says of the region round Vancouver, which we have generally supposed to be the best in that section of country:

"The country around Vancouver, and thence back to the foot of the mountains, is gravelly and poor, except that on some of the small streams there are narrow skirts of rich black soil. The small prairie lying near the branches of the Cathlapoot is, however, exceptions. These appear to have been formerly the beds of lakes, and retain, to some extent, a wet and marshy character. The soil being clay. The Columbia bottom below Vancouver is of a fine, sandy loam. Much of that on the immediate banks of the river is subject to overflow during the freshets—a double misfortune, as the deposits of the Columbia are not fertilizing, and the temperature of the water destroys growing crops."

This is the opinion of geologist Gibbs, who is good authority among men of learning. Speaking of the country of the Spokanes, the same geologist says:

"That portion of the Cascade range which crosses the Columbia sinks into an elevated plateau, which extends as far as the limit of the vision to the eastward—this is the Spokane plain. On it we could see no indication of water, not a single tree, except on the mountain spur; not one spot of verdure. It was of a dead, yellowish hue, with large clouds of black blending into the general tinge. It appeared to be a sage desert, with a scanty growth of dry bunch-grass, and frequent out-croppings of basalt. Descending by a very steep trail, we reached the valley of the Columbia on the 21st. Through a valley about a mile in breadth, in which not a tree is to be seen, and seldom even a bush, and which is bordered by steep walls of trap, lava, and sandstone, often arranged in a succession of high plateaus or steps, the deep, blue water of the Columbia flows with a rapid, powerful current; it is the only life-like object in this desert. The character of the valley is much the same as far as Fort Okinikane. It occasionally widens out slightly; again it is narrowed by the mountains pressing in. Sometimes the trail passes over the lower bottom; at other places over very elevated and extensive terraces; and in a few places over dangerous points of the mountains. At one of the latter, three miles above the En-te-at-kwu, two of our mules were instantaneously killed by falling over a precipice, and two others seriously injured. The difficulty of the trail at this point may be imagined from the fact that we

were occupied from 11 o'clock, A. M., until dark, in passing the train over a distance rather less than two miles.

"In this portion of the valley a few small groves of pine are met with; but the general character is entire absence of trees and bushes. In places only is the grass good; but we found no difficulty in so regulating the marches as to obtain enough for the animals. The soil is so very sandy that it is not probable it can ever be applied to any useful purpose. Granite, gneiss, and syenite, occur in the valley in large quantities and of excellent quality."

"The country through which we passed to the east of the Cascade range, may be described as generally barren and unfit for agriculture, and poor for grazing purposes. There are two small tracts which are exceptions to this rule; but I know of none which would be considered good in our Western States."

"The soil of these plains is generally thin and sterile, and covered with oxide of iron from the decomposed basalt; but in the swale, along the margin of the small streams, it is a rich, black mold. Bunch grass grows plentifully upon them, and they afford a good range for the horses of the Indian tribes to which they belong. It is, however, to be considered, that in all the stock ranges of this country, the scattered growth of the wild grasses renders necessary a large comparative extent of country. These plains, except on the northern skirts, are destitute of timber, and are swept by high and piercing winds."

Perhaps I have read enough on this subject. The Columbus River Pass is described here in the same general terms employed by the gentlemen heretofore referred to as coming from the mission in that country. Here is, however, a more exact description of it, by Lieutenant Abbot:

"The Columbia river forces its way through the Cascade range by a pass, which, for wild and sublime natural scenery, equals the celebrated passage of the Hudson through the Highlands."

Here it may be remarked that a railroad was made along the Hudson, but it was because, on account of the great expanse and quiet character of the river, it was possible to build in the river itself; to turn from the mountains, and, on trestle-work standing in the water, to construct a railroad. This pass, however, is a chasm through which the Columbia river pours with immense velocity. It is stated boats can pass within a few feet of the basalt columns on the bank without danger of striking sunken rocks, so closely does deep water border upon the shore.

"For a distance of about fifty miles, mountains, covered with clinging spruces, firs, and pines, when not too precipitous to afford even these a foothold, rise abruptly from the water's edge, to heights varying from one to three thousand feet. Some of the ridges are apparently composed of compact basaltic conglomerate; others are immense piles of small rocks, vast quantities of which have been known to slide into the river, overwhelming everything in their course."

Lieutenant Derby, with an appropriation of \$25,000, made for the construction of a wagon road from Fort Vancouver to Fort Dalles, made a careful examination, and he has reported the road impracticable without enormous expense. Lieutenant Gbbot, in mentioning the fact, says:

"The officer in charge of the work, Lieutenant G. H. Derby, United States topographical engineer, made a careful examination of the route, subsequent to my reconnaissance, and he has reported the road impracticable, without enormous expense. I think a careful survey would show the same to be true with reference to a railroad."

Then he goes on to describe the country in the valley of the Des Chutes, showing that there is a great belt of desert country extending north and south, east and west, probably including all that great region which lies between the great chain of the Rocky Mountains and the first chain of mountains which obstructs the passage of currents of air from the Pacific ocean.

(TO BE CONTINUED.)

NEW ORLEANS ROAD.

The importance of this enterprise to the country has been the subject of frequent articles in these columns. We believe that importance can not be overrated. We have heretofore said, time and again, that its construction can be but a question of time. Such are the connections it will make; such the in-

terests it will subserve; such the growth of the country here which now demands a speedy, safe, and reliable intercourse with the outside world; such its vastness in capability of agricultural production; of such magnitude the commerce which that production will render necessary, that not even a combination to prevent it, could long hinder the work. That there has been some hostility to it, manifest in some quarters has been evident, but it has been vain, and its efforts futile. And we have had pleasure in announcing that the projectors of the enterprise have placed it on the most certain footing, and have brought around it the influence of hosts of strong friends, and of sufficient capital to put it speedily through.

Of the trade it will, when completed, do, we have heretofore spoken. Let us recur to some of the items of traffic. There are at present five steamers a week between New Orleans and Texas, very often these steamers come and go crowded with passengers. When it is considered that this passage across the gulf is regarded universally with dread by travelers; that many take the circuitous and expensive land route via Red River rather than risk it; that in fact more people come into the State and go out of it by land than by water every year; and that with a comfortable railroad line thousands upon thousands would travel in both directions, who are now and always will be kept at home by a dread of the fatigues and dangers of the trip, it will be seen that an estimate of seventy-five passengers per day, each way, will fall far short of what may be recently anticipated for this traffic. Why it is a fact that nearly as many lives have been lost between New Orleans and Texas by steamboat and other vessels within four years, as upon all the railroads in the United States. Is a dread of this route at all suprising?

But again:—The prairies of Texas have an inexhaustible capacity for grazing cattle, horses and sheep. At this time the number of cattle annually driven and taken from the State each year is close upon 75,000 head. But statistics show, that notwithstanding this constant drain the numbers of our cattle are multiplying with great rapidity. Cattle now are sold for the drove, or shipment at about \$15 per head. If placed in market in like good order they are worth \$40 per head. The cost of placing them there by railroad will be about \$8 00 per head. Here then we have an increased value given to them of \$17 each, or in other words their value is more than doubled. This one fact alone, every one will see, will give to this exporting business an impetus that will swell the trade enormously. Shall we be considered extravagant when we suppose that 100,000 head will be shipped each year? Should we be deemed extravagant if we fixed the business at double that amount? But this is not all. The horses, mules, sheep, swine, etc., will go in vast herds along this route. Mutton is always in demand. Texas can produce more mutton than any other country of similar extent in the world.

And still further. Tributary to this road is one of the best cotton regions of Texas, producing now upwards of 50,000 bales of cotton that must be sent, part to Houston, and part to New Orleans, over it. We will put this traffic at that amount for twenty-five miles of the road.

But the lumber trade is one which, in its vastness, will surpass all the balance. Eastern Texas has some of the most inexhaustible pineries in the world. It is estimated by the most careful engineers that a double track

railway could not carry off this lumber if constantly employed in fifty years. And if it were all removed to-day, much less than that time would see it covered with as magnificent a growth as now. So it will be seen this is a trade that can never fail. It is also one which becomes beyond all calculation the great internal trade of Texas. The whole west now dependent on other sources for a supply, and obliged to do without to a great extent, on account of the great cost, will, when this road is opened, immediately commence a drain upon the great lumber treasury of Texas, which would exhaust any other any where. Shall we be deemed extravagant if we look for a transportation of 100,000,000 of feet?

Let us sum these and other items up, for that portion of the road running through Texas, 100 miles:

45,000 through passengers at 5 cents per mile...	\$225,000
6,000 way passengers at 5 cents per mile.....	30,000
100,000 cattle at \$2 50.....	250,000
10,000 horses and mules at \$5.....	50,000
20,000 sheep and swine at 40 cents.....	8,000
56,000 bales of cotton 25 miles at 31 1/2 cents.....	15,624
100,000,000 feet lumber average weight two tons per M at 3 cents per ton per mile \$3.....	600,000
5,000 tons merchandise at 5 cents per ton per mile.....	25,000
Transportation of Government troops.....	25,000
" Mails.....	20,000

Total.....\$1,248,624

What is there unreasonable about all this? And yet it is possible that our readers are not fully awake to this thing. Let them examine the matter. Let them find out any error in the calculation if they can. If they do, we promise to fall back upon still other items of traffic, which will swell the above amount fully fifty per cent.

Why Texas would be ready to-day to ship a million barrels of flour each year to market, if she could only find transportation for it. It can be raised in Northern Texas, we are assured by gentlemen in the flouring business there at \$4 00 per barrel, and will remunerate the farmer. It can be transported for twenty five cents per 100 miles. The distance to New Orleans from the wheat region is five hundred miles. Thus it may be placed in that market at \$5 25, and that too, six weeks earlier than from any other possible source of supply. The flour trade of New Orleans, now increasing at the rate of from one to two hundred thousand barrels per year, was last year over one and a half millions of barrels of which over a million were for export. This export trade is capable of indefinite expansion. Who then will say that we may not yet see a revenue of a quarter of a million of dollars from this item alone, ere many years for this 100 miles of road.

The theme is too expansive. It spreads out as we pursue it into a broad field, too broad to be traversed by a newspaper article. We have led the reader into it, and shown him somehow the road about it, and we leave him to pursue his own investigations at his pleasure.—*Com. Tel. and Business Mirror, Houston, Texas.*

MESSAGE OF THE GOV. OF CONN.

The message of the Governor of Connecticut gives a favorable view of the affairs of that State. The agricultural interests are highly prosperous, and great improvements have been made in the cultivation of the soil, improvement of stock, and reclamation of waste lands. The manufacturing interests has higher hopes of remuneration than existed last year.

The receipts into the State treasury for the past year were \$339,911, and the balance in

the treasury on the first of April, was \$12,506. The debt is only \$48,620, having been reduced the past year by the sum of \$32,540.

The School Fund amounts to \$2,043,372, and the income from it has been \$142,303, or nearly 7 per cent. The number of children in the State in January last was 103,103, an increase of 1,617 for the year. There is a marked improvement in the schools of the State.

The State prison labor is leased at a price 20 per cent. lower than formerly, but has defrayed all the expenses of the institution, and yielded a revenue of \$1,871 69.

The only line of new road put in operation during the year has been an extension of the New Haven, New London and Stonington road, between Groton and Stonington. There are now six hundred and two miles of railroad constructed within the limits of this State. The amount of capital paid in is \$18,727,367 31. The amount of floating and funded debt, chargeable to construction, is \$11,256,092 50. The net income for the year has been \$1,046,404 92, or three and one-half per cent. on the aggregate cost; while the gross receipts have fallen off over half a million of dollars. The New London, Willimantic and Palmer Roads and the Providence, Hartford and Fishkill Roads having failed to meet their obligations, have passed into the hands of trustees, and are now operated by them for the benefit of the bondholders.

There are now in the State seventy-three banks, with an aggregate capital of \$21,540,556, and a circulation of \$7,584,720. The circulation has increased \$3,335,582 during the year, but is a fraction less than the average for the preceding ten years. With the exceptions referred to, these institutions have maintained their reputation by rendering all needful facilities to business, and by furnishing a sound currency.

The deposits in the savings banks amount to \$13,968,462.—*Am. R. R. Jour.*

COAL OIL MANUFACTURE IN OHIO.

The following paragraph is interesting, as exhibiting the progress of a new kind of manufacture, and the development of new mineral resources:

The manufacture of Coal Oil for burning in lamps, has become one of the attractive features for Ohio capitalists. It presents a safe investment; for the growing demand for the article much exceeds the present means of manufacture, although many hundred thousand dollars of capital are invested.

We give below, a list of the companies formed under the general law of incorporation, passed May 1, 1852:

Great Western Coal and Oil Co., at Newark, Licking county, Ohio, with a capital of \$500,000.

Western Coal Oil Co., at Cincinnati, Ohio, with a capital of \$150,000.

Ohio Cannel Oil Co., at Colebrook, Perry county, Ohio. Capital, \$150,000.

American Coal Oil Co., in Canfield and Beaver townships, Mahoning county, Ohio. Capital, \$20,000.

Phoenix Coal Oil Co., in Steubenville and Island Creek townships, Mahoning county, Ohio. Capital, \$60,000.

Empire Coal Oil Co., in Licking and Coshocton counties. Capital, \$125,000.

Walbonding Coal Oil Co., in Bedford township, Coshocton county, Ohio. Capital, \$100,000.

Canfield Coal Oil Co., in Canfield, Mahoning county, O. Capital, \$50,000.

This is a showing of one million two hundred and eighty thousand dollars, directly invested in the manufacture of Coal Oil, in Ohio. And with all this vast amount of capital, busily employed, the market can not be kept supplied. We learn, by the Courier, that a company is forming in Zanesville, for the manufacture of this light shedding institution; and, no doubt, before the close of the year, a dozen more will be added to the present list. Let the work go on, it is but developing a small portion of Ohio's resources.—*Ohio State Journal.*

GEORGIA RAILROAD.

The President's Annual Report is dated April 13th, and from it we learn that the "profits" of the company, both gross and net, stand thus:

Gross earnings from road.....	\$1,154,621 08
Charged with ordinary expenses.....	\$550,969 87
New road, increased stock, etc.....	59,288 68
	610,257 95

Net from road operations.....	\$544,363 13
Receipts through bank for discounts, interest, dividends on stocks, premiums, rents, etc.....	\$134,324 20
Charged with interest on bonds, salaries, agents' commissions, taxes, etc.....	62,489 45
	71,534 75

Net income from all sources.....	\$616,197 88
From these profits two dividends have been declared, one of \$3 50 and the other \$4 00 per share.....	311,700 00

Carried to credit of Reserved Fund.....	\$304,497 88
Add balance to credit of Reserved Fund, 31st March.....	619,350 56

Balance to credit of Reserved Fund Account.....	\$923,548 44
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The business of the past year is represented as having been very profitable—both gross and net profits exhibiting an increase over the preceding year. The profits are also above the average of preceding years, and the proportion of net to gross profits is much larger than is an average of former years.

The bonded debt of the Company is now three hundred and seventy-three thousand and sixty dollars—all incurred for subscriptions to other roads—and becomes due in half yearly instalments. The report adds: "It should be met as it falls due, and no renewal asked or accepted for a dollar."

Some improvements on the main line of the railroad and its branches are recommended.

The credit of the bank is reported as very high; and the profits are gradually progressive, as its capital increases.

After some further remarks, the report concludes by stating that the road has been kept in good condition during the past year, notwithstanding almost incessant rains in the winter; and that the trains have run with great regularity and without material accident.—*Augusta Constitutional.*

The Editor of a Cedar Rapids paper exults as follows:

THE CARS.—This morning, May the 10th, while standing on Main street, in our own little village, our ears were saluted for the first time in this place, with the whistle of the railroad locomotive, though the cars are at a distance of some eight miles, and although the sound possessed but little musical attraction, yet we must confess that we heard it, as it came wafted by the breeze, with no small degree of satisfaction.

One month more, and the city of Cedar Rapids will be connected by railroad with Chicago and the more Eastern Cities.

DETROIT AND MILWAUKEE RAILROAD.

The paid up capital of the company on the 31st Dec., 1858, was as follows:

<i>Share Accounts:</i>	
For amount received on 47,215 shares of \$50 each.....	\$2,360,750 00
Less amount of arrears on 1,287 shares of the above.....	31,595 26
	\$2,329,154 74

<i>Bond Accounts:</i>	
Sterling bonds of the Oakland and Ottawa R. R. Co., at 6 per cent., due 1873, viz:	
\$2,600 non-convertible.	
28,400 convertible.	

\$31,000, say.....	\$155,000
Dollar bonds of the Oakland and Ottawa R. R. Co., at 7 per cent., convertible, due 1873.....	51,000
Dollar bonds of the Detroit & Pontiac R. R. Co., at 8 per cent., non-convertible, due 1863.....	150,000
Dollar bonds of the Detroit & Pontiac R. R. Co., at 8 per cent., non-convertible, due 1863.....	100,000
Dollar bonds of the Detroit & Pontiac R. R. Co., at 8 per cent., convertible, due 1866.....	250,000
Dollar bonds of the Detroit & Milwaukee R. R. Co., at 7 per cent., first mortgage, convertible, due 1875.....	2,500,000
Dollar bonds of the Detroit & Milwaukee R. R. Co., at 8 per cent., 2d mortgage, non-convertible, due 1866.....	751,500
Dollar bonds of the Detroit & Milwaukee R. R. Co., at 10 per cent., 3d mortgage, convertible, due 1863.....	750,000
	\$4,707,500 00
	\$7,036,654 74
Balance.....	1,971,714 47
	\$9,008,369 21

The complete examination of the accounts of the company, made up before the arrangement was completed for the advance of the \$75,000 in January, 1858, showing the company to be in this position.

The actual debts then due were as follows:

Bills and bonds due, nearly \$800,000, of which was then actually overdue and protested.....	\$992,247
Int. coupons, due Nov. 15, 1857.....	110,379
Debts due to contractors and others for work already done.....	284,269
Interest and damages on protested notes.....	36,456
Wages due to men engaged in the working of the opened line.....	48,000
Amount due for right of way and damages.....	12,000
Int. bonds due on shares up to the opening of the line.....	330,000
Int. due on bonds up to May 15, 1858.....	110,500
do do do Nov. 15, 1858.....	120,000
	\$2,043,853

To that has to be added the cost of completing 46 miles of road—station buildings, rolling stock, sidings, fencing, ballasting, &c., say about.....

\$2,909,000

It will thus be seen that the amount of indebtedness actually incurred and owing when the present board was elected, was upward of \$3,000,000; besides which a considerable sum had to be expended to complete the line. To meet that indebtedness, the company was in possession of the following assets:

Loan from G. W. R. R.....	\$750,000
2d mort. bonds, worth at par.....	600,000

Total.....	\$1,350,000
And in addition, the earnings of the line. A further loan of \$500,000 was effected from the Great Western Railway Company. This will make the present position of the company as follows:	

Balance against capital as per account to 31st Dec. 1858.....	\$1,971,714
Reduced by loan from Great Western Railway Co.....	\$500,000
By bonds due 1st Jan. 1860.....	332,000
Balance of revenue account.....	144,270
And old account arranged.....	100,000
Bonds on hand to be issued.....	200,000
	1,276,270

Total floating debt.....	\$695,444
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The expenditures of the company have been as follows:

<i>EXPENDITURE.</i>	
By amount expended on the construction of the line prior to the 1st January, 1858.....	\$6,738,593 60

Do. for rolling stock, viz:
Locomotive engines and tenders..... \$123,968 13
Passengers, freight and other cars.. 245,583 21
\$ 369,551 34

By amount expended during the period, between 1st of Jan. and 31st Dec., 1858:

For interest and discount on shares, bonds, loans, &c., including \$332,005 83 of interest bonds on the capital stock of the Co. up to the opening of the line to Lake Michigan..... \$743,623 77
For land, works, bridges, perm. way, &c..... 575,251 71
For stations, warehouses, wharves, &c..... 163,342 60
For workshops and machinery, including fixed engines..... 23,770 08
For electric telegraph..... 12,341 96
For ferry steamer for crossing Detroit river..... 13,700 00

By General Charges:
Law charges..... \$ 9,411 26
Engineering..... 25,395 43
Salaries..... 17,066 63
Agency..... 8,400 62
Police force..... 365 10
Office expenses..... 261 88
Insurance and taxes..... 20,810 87
Advertising, printing and stationery..... 1,528 00
Office furniture..... 2,445 59
Traveling and incidental expenses..... 4,143 85

Rolling stock..... \$1,622,179 55
Locomotives, engines and tenders..... 134,890 79
Passenger, freight and other cars..... 143,153 93

1,900,224 27
\$ 9,708,369 21

The Revenue for 1858 was as follows:

REVENUE ACCOUNT.

The following account shows the receipts and expenditures on revenue account for the year 1858:

RECEIPTS.

To amount received for the carriage of 127,414 passengers..... \$ 170,614 45
To amount received for parcels and mails..... 17,608 27
To amount received for freight and live stock..... 174,567 24
\$362,589 96
To amount received for rents..... 2,448 57
\$ 365,038 53

EXPENSES.

Amount.
By maintenance of way..... \$ 50,279 65
By locomotive expenditure..... 44,479 16
By repairs and renewals of passenger and freight cars..... 12,422 75
By passenger traffic expenses, including cost of steam ferry across Lake Michigan..... 42,692 71
By freight traffic do..... 47,678 34
By general charges..... 17,215 13

Total working expenses..... \$ 220,767 84
By balance..... 144,270 69
\$365,038 53

STEAM ON THE CANALS.—Since the close of the past season, a number of new boats have been built for the application of steam power, and some old boats altered for the same purpose, and upon further new principles,—the new boats especially, one called the *Eclipse* and one the *Rotary*.

All these boats, including the *Ruggles*, have been cleared from this city this spring, and have accomplished all that their friends have predicted. The *Ruggles* has completed her up voyage in five days and fourteen hours, and the *Eclipse* in five and a half days. We are informed that the latter boat has still further improvements, tending to another reduction of the expense, of the machinery, at such parts thereof so constructed as to effect a reduced consumption of fuel, thus further facilitating the undertaking.

These successful attempts in the use of steam on the State Canals, serve to show that time and expense will materially be saved hereafter in the transportation of produce and merchandise to and from the West; and will thus secure to the State and the City all the advantages that the most sanguine friends of the Canal system ever anticipated.

RAILROAD EARNINGS.—The Earnings of the Galena and Chicago Union Railroad Company from May 8th to 15th for this year and 1855, compare as follows:

	1855.	1859.	Decrease.
Freight.....	\$27,762 83	\$17 23 16	\$10,559 67
Passengers.....	12 179 70	8,494 17	3,785 53
Mails.....	2,125 00	900 09	225 00
Totals.....	\$41,167 53	26,497 33	14,570 20

MONETARY AND COMMERCIAL.

Since our last issue the demand for money has been moderate, and freely met by the regular houses on first class sixty day paper at the usual rates. The present active operations of the sorting houses and the constant drain of gold from the West to the seaboard, notwithstanding the very limited demand for money, are well calculated to prevent anything like plethora of capital. The present condition of financial matters, however, are as uncertain as the wind, and although all hope for the best, yet all are looking with great anxiety for something that may occur to affect the value of money. Speculation in foreign goods has run mad, and the precious metals are flowing in a steady and increasing stream to the old world; the crops, although full of promise, are not yet safe, and the question of extraordinary foreign demand, consequent on the war, is still a matter of doubt. These all have their influence on the present and prospective value of money, and are watched with no little anxiety.

Eastern Exchange is scarce, and it is with difficulty that bankers are enabled to supply all the demands of their customers. Rates have an upward tendency.

Relative to the exports of silver the *N. Y. Courier* of Monday says:

The three steamers which left to-day for Europe took the sum of \$2,016,000 in specie, making for the week \$5,017,000 against California receipts of \$2,000,050 and about \$1,000,000 from other sources.

The same paper of Tuesday remarks that the Bank Statement for the past week shows a decline in all the items represented, viz:

In Loans, a decrease of.....	\$1,563,000
In Specie, a decrease of.....	1,770,000
In Circulation, a decrease of.....	120,000
In Deposits, a decrease of.....	2,988,000

Nine of the Banks show an aggregate of twelve millions in specie on hand. Twelve show a reserve of less than 20 per cent. of cash liabilities.

The receipts of specie from the interior continue large, and the foreign export is much larger. The reduction of specie funds of the Western Banks will force a contraction of the currency and of Bank accommodation.

The money market presents the features of increasing ease for loans on call, or for short dates, and a decided disinclination to invest in long dates, even at the extreme rates of the day. Borrowers with the choicest names were quite willing to pay the full rates for long paper, but the lenders of money have advanced in their views, and are unwilling at present to operate in any paper connected with the European trade.

The prospects of the foreign houses being pressed for remittances by their friends and connections in Europe, become more evident by the arrival of every mail: and the increasing urgency of these demands may at any day effect a sudden and great rise in the rate of interest. The imports for next Fall both by purchase and on consignment, promise to be very large, and far in excess of the legitimate wants of the country—payments and advances will be demanded in cash, and not as heretofore in credits; and, although the certainly ruinous loss consequent on this will mainly fall on Europe and Foreigners, yet a violent derangement of our own currency will re-act disastrously for a time on our Banks and Domestic Exchanges. During the months of May, June, and July, in every year, our Bank Presidents are troubled how to employ the surplus funds of the country which periodically flow into the city, and in view of Foreign affairs, a Bank contraction will, no doubt, be steadily adhered to by the bankers of our own and other Atlantic cities. Contraction in their loans gradually day by day or week by week will injure no branch of our trade, but largely benefit the whole country, as a prudent preparation for the events of a war whose consequences no wisdom can foresee.

We observe to-day that the German houses are presenting their business paper for discount to send its avails home in specie. European goods can be bought cheaply there, now, if paid for in hard money, and orders are being received to remit home, in specie or sight drafts, sixty day bills being not wanted.

The Stock Market gave way to-day. The only active Stocks were the New York Central and Rock Island. The last named, however, declined one per cent. The former held its own at the morning Board, and gained $\frac{1}{2}$ in the afternoon. Galena and Chicago fell $\frac{1}{2}$, and Michigan Central one per cent. Michigan Southern was steady; Erie fell $\frac{1}{2}$, Illinois Central $\frac{1}{2}$.

There has been an important meeting of the friends of the Erie R. R. Co., at the Company's transfer office in Wall St. The Directors, we learn, show that the March Coupons have been paid on the second and third Mortgage Bonds, and that \$170,000 will pay the amount overdue on the first and fourth, and that the road and equipments were never in a better condition. All parties felt and expressed as highly encouraged by the brighter prospects ahead.

¶ The State Treasurer of Mass., has received from the United States Government, \$327,000, the proceeds of the Massachusetts claim, which passed the last session of Congress.

¶ Isaac Trumbull, Esq., now in his ninety-fourth year, has been cashier of the Farmer's Bank, of Delaware, for fifty-five years.

The April earnings of the New York Central Road were as follows:

For 1858.....	\$668,424
For 1859.....	443,500

Decrease..... \$224,924

Our First Experience with a Sewing Machine.

A "STAR" PAPER BY THE REV. HENRY WARD BEECHER.

AMONG the things which we did not, but now do believe in, is the Sewing Machine. One thing after another had been invented; one machine after another had superseded manual labor, until human hands seemed about to go out of use, for any other mechanical purposes than that of lovers' pressures, orators' gestures, and for beaux' and belles' gloves. But we always consoled ourselves that one or two things there were yet, which no machinery could perform. We could imagine children put through a whipping-machine, and we had long been accustomed to see them taught by automatic machines. There was a time honored business handed down to us, without a break, from the Garden of Eden, of courting—and kissing as one of its ordinances—no machinery could ever perform that. Machine poetry, and machine sermons, we were familiar with. Babbage can make machines for ciphering, for computing logarithms, for computing up interest, but can he invent a machine for saving interest, and capital too, for that matter? And, oh! can there ever be a machine for answering letters? We would pay any price for a machine, into which letters being put, and cranked turned, there should drop out at the other side answers as good as the letters, folded directed, and stamped!

But machines have steadily gained ground, and the iron muscle has relieved the flesh hand; machines for boring, sawing, cutting, planing; for making bread, (I wish there was one for eating some of it,) for pumping water, for making cattle draw their own drink. But, notwithstanding, we firmly believed that some things would never be done by any fingers except human, and eminent among these impossible things was sewing! Nothing we were sure, could ever perform that, except the latest and best invention of Paradise—Woman!

When the rumors began to prevail, then, respecting an invented sewing-machine, we lifted our eye brows gently, and went on our way with a quiet consciousness that we could not be taken in by any such story. We regarded it as of a piece with new-found morality in old politicians, with the thousand annual rumors of some heaven dawning virtue in Washington City—a mere device to catch the credulous.

But, day by day, the clatter grew. Indeed, we surprised ourselves with a coat, sewed in important respects by machine. We saw linen pyramids of sheeting made for hotels and steamboats by sewing machines.

The case was growing serious, indeed; and, at last, it came to a head, when the head of the family informed us, that a woman was to come in a few days, with her Wheeler and Wilson, and do up the family sewing. Of course, we submitted without a word. And the three capable persons of this household began to prepare matter for the machine, an extent which showed how perfectly they had been fooled by the story of its executive ability. Piles of large stuff lay in each corner; little stuff covered the table; and miscellaneous stuff lay everywhere. We ran against cotton heaps, were in danger of getting tangled in webs of linen and sheeting at every turn, and such ripping, and tearing, and cutting, and basting, as went on, would lead one to imagine that an army was to be clothed.

The day dawned. The woman came, and the iron Wheeler and Wilson came with her, only the lady had to act as beau, and offer her aid to wait on Messrs. W. and W. After a little, there arose a hum from our chamber, not unlike the buzz of a wheat-mill, such as we have heard in summer, sitting under willow trees on the edge of a stream, over against a red mill, white dusted. Soon we heard excited exclamations. Every body seemed stirred up. The girls left their work; the children forsook their playthings, and we followed the example.

There sat before the simple machine-stand, a fair young woman, some sixteen years old, whose foot, like that of old-fashioned flax-spinners, was working the treadle with the nimblest motion. Then came the conviction, for the first

time, that sewing was conquered and vanquished! Long sheets, entered the fatal pass, streamed through, and came out hemmed, in a ridiculously short time. An hours work was done up before your eyes in one minute. A skirt was set in, of such dimensions, that (we call Baron Munchausen to witness!) a man could not get round it by fair walking, in less than—well, in some time! It streamed through the all puncturing Wheeler and Wilson about as soon as a good-sized flag, being hoisted, would unroll and flow out to the wind. A bundle of linen took its turn, and came forth a collar, a handkerchief, a cap. There goes in a piece of of cloth!—there comes out a shirt! We were bewildered. Not much was done for some hours in that house but gaze and wonder. We mistake. A good deal more was done, and done more effectually, than had ever been done in ten times the time before! What heaps of towels—what piles of sheets—what bedfuls of small trumpery—what bureausfull of fine trash—what carpet-littering stacks of unmentionable matters that make up the cloth inventory of household wealth!

The dismayed woman of the house saw her three days' prepared work melting away before noon, as a three days' April snow disappears in a few hours!

The voracious machine began to show its teeth and to demand more food—and now it was a fair race, whether two women could prepare as much as one machine could perform! It did our very souls good. At last, we hoped this was working fast enough. Oh, what early hours has our lamp been made to illumine! Ah, what breakfasts have we eaten, and seen cleared away, long before the sun touched even the cheek of day! What impetuous industry had glowed about the house, forenoon, afternoon, night, midnight—never enough, never overmatched! We grew tired even to look at it! At last, said we, you've got your match. Now, then, we will sit down and see this race, with a satisfaction that shall include years of revenge for disturbed indolence!

For a long time the match was doubtful. Sometimes it was the machine that had the advantage, and sometimes it was not. The contest was passing into the middle of the afternoon. It was doubtful. Sometimes the fast-driven needle evidently gained, then again, in rounding up sleeve gathering, the needle flagged, and then the hand-worked scissors gained! But iron and steel are more enduring, even, than a housewife's courage. And though for any single hour the hand could prepare faster than the machine could execute, yet, taking the day through, Wheeler and Wilson had the advantage, and it came out at dark decidedly ahead. That settled it. There was a revolution in this household. Our Miriam sounded her timbrel and triumphed over the cruel Pharaoh of the needle, whose dynasty and despotism were ended!

Now, sewing is the family amusement. Our Wheeler and Wilson is played on a great deal more than our Steinway piano—and is the cause, too, of more real music than is ever got out of that instrument; for two canary birds, perched on either side of the book-case, understand the first click of the sewing machine to be a challenge, and while the machine sings *staccato*, they warble *ad libitum*, and between the *solfeggio* of the one and the *cantabile* of the other, we go crazy.—*Independent*.

New Time Table OF THE NEW YORK CENTRAL R. R.

Leave Albany.			Arr. Buffalo.			Arr. S. Br.		
Steamboat Exp.	7.00 A. M.		7.00 P. M.		7.00 P. M.			
Mail	9.10 A. M.		12.50 A. M.					
New York Exp.	11.15 A. M.		9.00 P. M.		9.00 P. M.			
Night Exp.	5.00 P. M.		4.00 A. M.		4.00 A. M.			
Utica Accom'n.	6.00 P. M.		10.00 P. M.					
N. Y. Mail	11.15 P. M.		10.00 A. M.		10.00 A. M.			
Leave Buffalo.			Leave Bridge.			Ar. Alb'y.		
New York Exp.	5.15 A. M.		5.15 A. M.		3.30 P. M.			
Steamboat Exp.	8.00 A. M.		8.00 A. M.		8.00 P. M.			
Mail					2.30 P. M.			
Cleveland Exp.	6.00 P. M.		6.00 P. M.		4.40 A. M.			
Cincinnati Exp.	11.00 P. M.		11.00 P. M.		8.20 A. M.			
Utica Accom'n.					10.00 A. M.			

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SECOND TRAIN—No. 2 Express, at 8 A. M., connects via Columbus, Bellair, and Benwood; Wheeling, via Columbus, Steubenville, and Pittsburg; via Columbus, Crestline, and Pittsburg; via Columbus and Cleveland; Detroit, via Cleveland and Steamer; Springfield. This train stops between Cincinnati and Columbus at Plainville, Milford, Loveland, Morrow, Spring Valley, Xenia and London.

THIRD TRAIN—Accommodation, at 4:40 P. M., for Columbus and Springfield.

FOURTH TRAIN—Night Express, at 11:30 P. M.; connects via Columbus, Bellair, and Benwood; Wheeling; via Columbus, Steubenville and Pittsburg; via Columbus, Crestline and Pittsburg; via Columbus and Cleveland. This train stops at Loveland, Morrow, Corwin, Xenia and London. *Sleeping Cars on this Train.*

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4:30 P. M. TRAIN—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Connects, also, at Dayton for Troy, Piqua, Sidney, Lima and Chicago. Also connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago.

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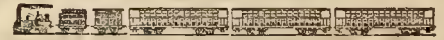
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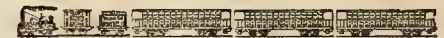
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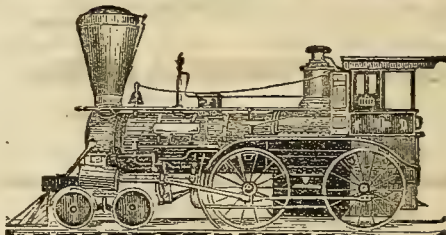
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President of the Board

Jan. 5. 11.

The Railroad Record.

E. D. MANSFIELD,
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CINCINNATI:

Thursday Morning, June 9, 1859.

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Publishers and Proprietors.

IF The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

FREEDOM IRON WORKS.—We take pleasure in calling the attention of Railroad men to the advertisement of the above company, in another column. This Company is now producing the most reliable Locomotive Tyre. The superior character of their Axles, both Engine and Car, Piston and Pump Rods, etc., has been for some time well established.

Iron from these Works has, for many years, been used by Government, where the greatest strength, purity and finish, were required. It has been, and is used for Spring Wire, Shovels, Nail Rods, all kinds of Machinery, etc., etc. The celebrity of the Juniata Iron is largely due to the iron made for fifty years at this place. The present proprietors intend continuing the same process of manufacturing, believing that in no other way can a really reliable Iron be produced.

IF The Railroad War is progressing with greater vigor and destructiveness than the war in Europe, and is attracting as large a share of public interest. Fare has been reduced from Columbus to New York and Boston via Cleveland, Columbus & Cincinnati and Lake Shore Railroads, as follows: Columbus to New York, \$10; Boston, \$12; Philadelphia, via Crestline, \$8.

Also, via the Pittsburg, Fort Wayne & Chicago and Pennsylvania Railroads, as follows: From Crestline to Boston, \$11; to Philadelphia, \$7; to New York, \$9; to Harrisburg, \$9; so that while the Railroads are cutting each others throats over the spoils, the public quietly step in and carry off the prize.

NEW YORK & ERIE R. R.—This gigantic farce is about played out, and the road will be in the hands of receivers, if we mistake not, before the next year comes round, despite the immense labors of its \$25,000 President.

SOCIAL STATISTICS.

LAWS OF LIFE AND MORTALITY.

Modern Statistics will, in time, ascertain all the laws, which regulate the progression and decay of life. That these laws vary with the moral and physical condition of society, is a known fact; and if we trust the revealed declarations, such they were intended to do, by God, the creator and law giver of man. Birth, longevity, comfort, health, and all the conditions upon which the happiness of man depends, depend also upon his own conduct, in reference to the good or evil of that conduct. The whole experience of mankind proves this to be the case; and yet, it is not shown so palpably to unscientific minds; but, what a clear exposition, deduced from social movements, would prove both valuable and instructive. It is only within a few years, there has been commenced, in the United States as well as Europe, a series of Statistical inquiries, which, if persisted in, will in a short time, establish the laws of life and mortality, as they exist, in the present condition of society. We have before us the "Report of the State Librarian," of Connecticut, on the "Registration of Births, Marriages, and Deaths," for the year 1858. For some ten or twelve years, the State of Connecticut has been perfecting a registration of these facts. At first the Reports (as in Massachusetts,) were very defective; but, the system was gradually made more perfect, and as the returns are now full and uniform, they furnish apparently a tolerably just basis for determining these laws of social movement, as they are developed in the society of New England. We propose to state the general facts, with such deductions as necessarily flow from them.

Let us begin with Marriage, in a well regulated society, the source of life.

MARRIAGES.—The whole number of marriages reported is 3,737, a decrease of ten from the preceding year; the number of marriages has decreased in every year since 1855, when 4,286 were registered. The decrease in marriages appears to have been in 1858, among the foreign population, for the number in which both parties were Americans has increased 111 over those in 1857.

The following table shows the number of marriages where both parties were either natives or foreigners, or one party native and the other foreign, as reported for four years.

Year.	Total number of Marriages.	Both parties American.	Both Foreign.	Am. Male and For. Female.	For. Male and Am. Female.	Nativity not stated.
1855....	4,286	2,619	1,287	81	118	181
1856....	4,069	2,688	1,154	95	128	24
1857....	3,747	2,388	1,068	106	106	79
1858....	3,737	2,499	966	132	111	29

The population of Connecticut in 1850, was

370,792. The increase of population is there scarcely over $1\frac{1}{4}$ per cent. per annum. In 1855 the population was about 394,000, and in 1858 about 417,000. The average of that is 405,000. The average of marriages is 4,000 annually. There is, therefore, 1 marriage to 101 persons. As a marriage includes two persons, there is really 1 person married to every 50 people annually. If, now, we consider that one-third the whole population are without the marriageable limits, and that of those within, much the greater number are already married; it follows, that those married each year embrace a very large proportion of those who are marriageable.

2. Let us now look to the births.

BIRTHS.—The whole number returned for the last year, is 11,299, a decrease of 56 from the preceding year; of this number 5,872 were males, 5,360 females, and of 67 the sex was not ascertained. Exclusive of those whose sex was not reported, the proportion was 52.28 per cent. of males and 47.72 per cent. of females, a proportion of males slightly less than in the previous year, when calculated in the same manner, it was 52.82 per cent. of males and 47.18 per cent. of females. There were born in the first quarter of the year, 2,889; in the second quarter, 2,850; in the third, 2,882; in the fourth, 2,654; the most prolific months appear to have been August and March. Of illegitimate births 89 were indicated. Of plurality births, 115 cases were reported; in the town of South Windsor, one lady gave birth to triplets, October 23, 1857, and to twins, October 13, 1858, making five children within a year.

The number of births of males is just 5 per cent. greater than those of females; and this is a universal law of vitality. All statistics establish the same truth; and there is, in the course of nature, a reason for it, which we shall not now state; but, which beautifully illustrates the just and well balanced equilibrium of natural forces.

There is no great inequality of births in the different quarters of the year; although the largest number are in the warm seasons. The births of the six months from the 1st of March to the 1st of September are considerably greater than those of the other six months; but, as births are entirely dependent on conceptions, this proves that the conceptions in the Summer and Autumn are the greatest, and those in the Winter and the Spring the least. The conceptions in May and December are the greatest; and it may be remarked, that there are no two months in the year, in which the average of human strength and health is greater. Tracing these laws of life up to their sources, we find that they all conform to the strictest reason; and that the forces which create and destroy vitality arise from invariable laws of nature, and there is beautiful consistency in all their movements.

3. **DEATHS.**—The laws of mortality are those which are most uncertain, and most depend-

ent on the condition of society. There are three great causes of variations in the proportion of deaths. 1. *Epidemics* or pestilences. 2. *City or civic life.* 3. *Habits of luxury.* All these causes greatly increase mortality beyond the natural limits. Pestilences are now far less common and less general in their prevalence, than they were in the early ages of the world; and some kinds of pestilence, like that of small pox, are in civilized countries almost extinguished. On the other hand, cities and manufacturing towns have greatly increased mortality. So also the prevalence of luxurious modes of living is constantly tending to enervate the constitution, of those, who indulge in them. The registration of deaths in the State of Connecticut exhibits some curious and valuable illustrations of the causes of mortality.

1. Proportion.

Total deaths in 1858.....	6,618
Population.....	417,000
Proportion.....	1 in 63

If we allow something for omissions, the proportion will still be 1 in 60, and certainly this proves a very high degree of health, and longevity. Let us now compare the proportions in civic and rural life, which those tables enable us to do, by furnishing the returns of each town.

2. Effects of Civic Life on health.—Let us take the returns of the large towns:

	Population.	Deaths.
New Haven.....	25,000	638
Waterbury.....	8,000	171
Norwich.....	11,000	165
Bridgeport.....	8,000	234
Middleton.....	9,400	148
Hartford.....	18,000	395
Aggregate.....	77,000	1,771
Proportion.....		1 in 45

Let us take now some country towns, where there are no more than small villages:

	Population.	Deaths.
Avon.....	995	14
Bloomfield.....	1,412	16
Farmington.....	2,630	36
Glastenbury.....	3,290	42
Stamford.....	2,962	39
Wethersfield.....	2,523	58
Northford.....	998	12
North Haven.....	1,325	21
Orange.....	1,476	25
Oxford.....	1,564	18
Wolcott.....	603	9
Franklin.....	895	14
Lisbon.....	938	12
Salem.....	764	6
Brookfield.....	1,359	12
Huntington.....	1,301	19
Ridgefield.....	2,237	25
Sherman.....	984	7
Westport.....	2,651	29
Wilton.....	2,066	36
Pomfret.....	1,848	21
Woodstock.....	3,381	42
Barkhamsted.....	1,524	10
Canaan.....	2,627	36
Colebrook.....	1,317	29
Harwinton.....	1,175	10
Norfolk.....	1,643	20
Roxbury.....	1,114	14
Hodden.....	2,279	17
Hebron.....	1,345	11
Mansfield.....	2,517	25
Aggregate.....	51,443	694
Proportion.....		1 in 73

Here are 31 rural towns giving a proportion of 1 in 73; while the cities and large towns give 1 in 45. The deaths in large towns is 50 per cent. greater annually than in the rural population.

If we were to go into larger cities, the pro-

portion is still greater. The deaths in New York are 1 in 30. The deaths in New Orleans are 1 in 20. In fine, it is a clear and settled principle, that crowding people into towns, with close air and dense habitations, doubles the rate of mortality, as compared with a purely rural population.

When we look a little farther, we find that age and sex modify mortality a great deal.

3. Age.—Thus, the deaths were:

Age.	No.	Proportion.
Under 1.....	1,282	20 per cent.
1 to 5.....	967	14 " "
5 to 10.....	582	4 " "
10 to 20.....	361	6 " "
20 to 30.....	645	10 " "
30 to 40.....	472	7 " "
40 to 50.....	388	6 " "
50 to 60.....	462	7 " "
60 to 70.....	496	7 " "
70 to 80.....	621	9 " "
80 to 90.....	383	6 " "
90 to 100.....	85	1 " "
Not stated.....	—	—

This shows that more than one-third of all who are born die under one year of age; even in a healthy state of society.

More than one-half die under thirty years of age.

But, while we may be surprised at this early mortality, we shall be quite as much so, to find an extraordinary longevity. No less than 17 per cent. or one-sixth part of all born live beyond the allotted life of man, and no less than one-twelfth part live beyond eighty years of age.

The law of life, between the sexes, is more complicated than those we have stated, and will require more space than we have now to explain. Our principle, however, is this: the deaths of females are much the greatest in the child bearing period; but, surviving that, their longevity is much greater than that of males. The hazards of life are on the whole, even greater to males than the greater proportion of male births, as is proved, by the fact, that at seventy and eighty years of age there are more females alive, than males. We close for the present, hoping, hereafter, to develop something more of the laws of life.

GAS LIGHT IN CARS.

The efforts at perfecting the use of gas in railroad cars may be distinguished as high pressure and low pressure. High pressure designating the system under which the gas is compressed to a tension equal to that of the steam in a locomotive, and, consequently, requiring thick and stout vessels, while low pressure designates the more modern system of allowing the gas to flow in of itself at the ordinary very gentle pressure of the street mains, and be expelled by a meter actuated by clock-work. The latter system seems to meet with considerable favor in the East. We have seen a letter from Mr. Hoyt, the Superintendent of the New York and New Haven line, expressing his satisfaction with its working, and the system has recently been introduced in one car on the Boston and Lowell Road. Each of the night express trains on

the New Haven line between New York and Boston, now carry a smoking car thus lighted. The charging requires but a few minutes time, and no machinery. The reservoir, which is a broad thin box of sheet iron, suspended beneath the floor, is of sufficient size to contain some fifty or sixty feet of gas, and it receives the gas from the street mains at the terminal station through a rubber hose pipe. The gas holder is divided by a flexible diaphragm of rubber cloth, and while running common air is pumped in on one side of this diaphragm, by clock-work so as to expel the gas at a proper rate from the other side. When the burners are shut off the action of the clock work stops of itself, to commence again so soon as they are opened. It appears an ingenious and effective means of overcoming most of the difficulties attending the introduction of gas on these rapidly moving and actively vibrating structures. It is evident that any modification of the ordinary gas holders used for stationary purposes would be unsuitable for such situations. S.

CINCINNATI & CHICAGO R. R.

RECEIVER APPOINTED.

The United States Court at Indianapolis, June 2d, Judges McLean and Huntington presiding

DECREED, That the lease of the Road by the Company, on the 16th day of October, 1856, to John W. Wright & Co., was without authority, and ordered

"That Wm. J. Ball, of the county of Vigo, Ind., be appointed Receiver, whose duty it shall be to take possession, control and management of said Road, with all and singular its property of every kind and description, and the control and appointment of all its officers and agents. * *

That all the receipts and income of said Road be paid at stated periods to be named by said Ball to him, as such Receiver, and that all the expenditures of said Road be paid by him, he first to carefully examine and credit the accounts included in, and in making up said expenditures.

The said Receiver shall make to the Clerk of this Court, monthly reports, and oftener if the Court, or any Judge thereof in Vacation, shall so order, shewing a true statement of the receipts and expenditures of said Road."

We think this a very fortunate turn in the affairs of this Company. The stockholders and creditors of the Company will now have the privilege of knowing what the earnings and expenditures of the Road are. The character and reputation of Mr. Ball as an upright business man, will no doubt satisfy all parties interested; that their interest will be protected.

The Cincinnati & Chicago Company's Road now completed and running, extends from Richmond to Logansport, Ind., 108 miles. The trains from Cincinnati pass over the Cincinnati Hamilton and Dayton and Eaton and Hamilton Roads, 70 miles, making 178 miles from Cincinnati to Logansport, where it now

terminates. The extension from Logansport to Valparaiso, on the Pittsburgh, Fort Wayne and Chicago R. R., by which road their cars will be run into Chicago, is now all under contract and a large number of men at work, and will be completed at an early day.

The line of road running nearly due west from Logansport, across Indiana, Illinois, and in Iowa to Burlington on the Mississippi river, under the names of the Toledo, Logansport & Burlington R. R., and the Peoria and Oquaka R. R., is now fast approaching completion, the whole of the unfinished portion being under contract, with full provision for the stocking and working of the whole line, which will be completed within the month of November next.

This will be an important connection to the Cincinnati and Chicago Railroad, opening a new route from Cincinnati to Chicago, by the C. & C. R. R. to Logansport, thence over the Toledo, Logansport and Burlington R. R. to its intersection with the New Albany and Salem R. R., and thence to the intersection of the Ft. Wayne and Chicago R. R., which will be equal, if not superior, to either of the routes now traveled.

ANNUAL MEETING OF THE OHIO & MISSISSIPPI COMPANY.

At the Annual Meeting of Stockholders in the Ohio & Mississippi Company—Eastern Division—the following named gentlemen were elected Directors:

Larz Anderson, James Hall, William D. Griswold, Henry C. Lord, James C. Hall, William H. Clement, Thomas G. Mitchell, Joseph Torrence, Samuel W. Pomeroy, J. D. Lehmer, Henry D. Bacon, Lewis B. Parsons, William H. Aspinwall, Henry Chauncy, Edwin Bartlett, Samuel W. Comstock, Joseph W. Alsop, F. Schuchardt, Edward Delano, William Whiteright, Jr., Samuel L. M. Barlow.

ABSTRACT OF THE REPORT OF THE GENERAL SUPERINTENDENT.

The management of the road for the year just closed has been attended with embarrassments of an unusual character. During that period we have been visited with five floods, commencing with that in the Wabash, in the latter part of May, and extending into June, which was followed by the flood in White river, and another in the same month in the Mississippi, and again in the smaller streams near Cincinnati, causing a serious break in the bank of the Whitewater Canal, near this City—and in the Ohio in the month of February of the present year.

During each one of these floods, the Freight-Business of the Road was suspended, or carried on at a heavy cost, for periods varying from three to ten days, and the Passenger Business was seriously interrupted.

The damage to the track and Roadway, by the floods of June was comparatively slight, but the effect upon the Local Traffic of the Road, by flooding the valleys of the Wabash, White River and smaller streams—which are the most highly cultivated and best Corn producing lands in the region of country through which the road passes—was for the time being disastrous in the extreme. The continued heavy rains which produced this unusual stage of water in the rivers, had the effect to pre-

vent the cultivation of the usual quantity of land upon the upland farms, and still further diminished the agricultural productions of the country, which, for the present, form the principal basis of our local business.

Succeeding this state of affairs, the Ohio, Mississippi and Wabash rivers have continued in a navigable condition, with but a few days interruption, up to the present time. In addition to the loss of Local Trade, caused by the floods referred to, we have had to contend with low rates, brought about by the competition for freights, between the four great Eastern lines, in the months of August, September and October, the period of largest revenue, and under ordinary circumstances of greatest profit in this branch of business, which by this reduction in rates, was rendered valueless as a source of net revenue, if not attended with actual loss to the Company.

It is some consolation to know, that however seriously we have suffered in loss of business and extraordinary expenses, in consequence of these floods, a recurrence may be guarded against by a very moderate outlay, when the importance of the object to be attained is considered.

It is safe to say that an amount equal to the losses of this single year, would be sufficient to place the road beyond the contingency of like interruptions for the future, and I would earnestly call your attention to the necessity of prompt action. Losses from delays like those which have occurred are not to be measured by the immediate outlay, but are extended and enlarged by the diversion of travel and trade, which grows out of a lack of public confidence in the ability of a road to transact its business with certainty and regularity.

Particular reference is made in the Statement of Expenses for repairs of Road and Bridges, and transportation expenses, to the items of extraordinary expenditure, arising from the floods.

The Gross earnings of the Road, as reported by the Auditor, have been for the year ending May 1st. \$81,957 31
Current Expenses..... 614,432 64
Net earnings, \$267,524 97

The amount stated as for current expenses, includes extraordinary repairs and expenses of all kinds, except compensation for the use of cars and locomotives owned by the associates, which remains to be adjusted, and will be a proper charge upon the earnings of the year.

The working expenses have been 69½ per cent of the gross earnings. Allowing for repairs made, not due to current wear, the loss by low rates and the cost of floods, the working expenses would be about 61 per cent of earnings.

You are aware that the ratio of expenses to gross earnings is no criterion of economy in working a railroad. While a short line with large receipts might justly be charged with extravagance, when its expenses take 45 per cent of its earnings, a long line, with light receipts, though absorbing 90 per cent in expenses, might be characterized by the closest economy of management.

To arrive at a just estimate of the economy of management in any case, it is necessary to take into consideration all the circumstances of condition in regard to the road in question: the condition of track, the quality and character of grade and curvature, the proportion of bridges, the security of the track by fencing or otherwise, facilities for handling freight at stations, the condition and character of the equipment and conveniences for repairing the same, and rates received for transportation,

depending on competition and other influences, and varying on different roads, all form the elements which enter into and control the question of economy when applied to railroad management.

TRANSPORTATION EXPENSES.

This account includes Legal Expenses, Salaries of Gen'l Superintendent, Gen'l Ticket and Gen'l Freight Agents, Local Agents and Laborers about Stations, Treasurer, Auditor, Paymaster and all Clerks, and expenses of their several Offices: The Salaries and expenses of all Foreign Agents, as solicitors for a Freight or Passenger business: Also, the Train-Masters of the two Divisions, Passenger and Freight Conductors, Engineers and Firemen, Baggage-men and Brakemen, and all other expenses actually incurred in the running of Passenger and Freight Trains, not directly chargeable to other accounts. This account also includes the Salaries of Superintendent of Telegraph Line and Operators, as well as the cost of renewal and adjustment of Telegraph Line.

The amount charged to this account is.....\$339,196 93
The amount charged to same account last year 185,893 12

Showing increase.....\$53,303 81

There is included in this amount, in addition to the expenses of floods in June, 1858, the expenses of running Steamboats between Cincinnati and Aurora, in February, 1859, Drayages, extra Omnibus Expenses, &c., which amount to \$5,355 47 and Legal Expenses, amounting to over \$5,000 00.

ROADWAY.

This amount includes cost of replacing iron rails, ties, and chairs, spikes, surfacing track, opening ditches, widening embankments, policemen, &c., &c.

The amount charged to this account is.....\$128,710 88
Amount charged to same account last year..... 84,616 09

Showing increase.....\$44,094 79

A considerable expenditure has been made for iron and ties. There is also included in this amount, \$8,411 24, cost of repairing canal bank, damaged by the flood near this city, and \$3,359 79 cost of repairing slide in embankment at Otter Creek, besides a large sum for removing slides, widening and completing embankments, &c., &c., on Vincennes Division, and for section houses, hand cars, &c., for the entire road.

The wear and depreciation of iron rails and ties have been more nearly made up during the year preceding, and the road bed has been decidedly and permanently improved in value.

Frogs and switches of a new and improved form, which will add greatly to the safety of trains, are being gradually introduced upon the road.

We shall need both iron and ties for repairs, and 150 tons of iron for side tracks.

BRIDGES.

This account includes labor and materials for repairs and renewals of bridges and trestle work and bridge watchmen.

The amount charged to this account is.....\$24,678 40
Amount charged to same account last year..... 14,120 15

Showing increase.....\$10,558 25

There is included in this amount the cost of repairing, rebuilding and extending Trestle works, damaged by the floods of June and February. Several of the Bridge Abutments are defective, and will require rebuilding in a short time. The Bridges have been secured by good firm trestles for the present.

I would again call your attention to the necessity of protecting the Bridge structures from the weather, and of filling up such Trestles

the works as are not needed for water ways, and securing in a more permanent manner those which must be retained.

The work of rebuilding the Bridge at Mill-Creek, and filling the Trestle work at that place, and also the Trestle work near Lawrenceburg has been placed under contract, to be completed with as little delay as practicable.

The contractor is now engaged in getting out stone for the masonry at Mill Creek, and making preparations for the work near Lawrenceburg.

WATER STATIONS.

This account includes the Cost of Labor and Materials for repairs of Pumps, Pipes and Buildings.

Amount charged to this account is.....\$2,149 69
Amount charged to same account last year..... 3,208 81

Showing decrease.....\$1,059 12

DEPOT BUILDINGS.

This account includes Labor and Materials for repairs and additions to buildings.

The amount charged to this account is.....\$4,870 14
Amount charged to same account last year..... 4,352 61

Showing increase.....\$517 53

IMPROVEMENTS AT VINCENNES.

I would renew my recommendation, in relation to the erection of suitable buildings at Vincennes, for the accommodation of the business between our Road and the Evansville and Crawfordville Railroad, and also for that of the New Albany and Salem Railroad, at Mitchell, and that proper accommodations be furnished at smaller stations.

PASSENGER CARS.

There is included in this account the rebuilding of six passenger cars throughout, fitting up two cars with Foote's Patent Ventilator, a large number of new wheels and axles, and twenty sets of elliptic steel springs. Most of the cars now ride admirably well. The actual expenditure for repair of passenger cars has been \$31,421 92, this amount is reduced \$6,294 49 by credit for use of cars on Western Division.

FREIGHT CARS.

This account includes labor and materials for repairs and renewals of freight cars.

The amount charged to this account is.....\$6,845 66
Amount charged to same account last year..... 9,866 31

Showing decrease.....\$2,960 65

The actual expenditure for repairs and renewals has been \$22,329 77 which is reduced to the sum named by a credit of \$15,484 11, received for use of cars on Western Division of the Road.

I am well satisfied that the new iron trucks, with outside bearings, will effect great economy in repairs, and secure an important gain over the present trucks, whether inside or outside bearing in the power required to haul trains.

LOCOMOTIVE ENGINES.

This account includes labor and materials for repairs and renewals of engines.

The amount charged to this account is.....\$57,691 58
Amount charged to same account last year..... 50,260 06

Showing increase.....\$7,431 52

The location of the shops at Cochran adds materially to the cost of repairs, and I would advise that a change be made whenever the means of the Company will admit of the outlay required. The present buildings can be used for constructing cars and as an outside depot for general purposes.

The right to the use of Loughridge's Patent Brake has been purchased by the Company, and it will be applied to trains at an early day.

There can be no doubt of its value as a measure of safety and economy.

FUEL.

This account includes fuel used for all purposes, except at shops, hauling by trains, &c.

The amount charged to this account is.....\$68,275 26
Amount charged to same account last year..... 61,041 80

Showing increase.....\$7,233 46

The mileage of engines for the year ending May 1st, 1858; was 589,168 miles. Average cost of fuel for all purposes, except at shops, per mile run, 6.97-100 cents.

The mileage of engines for the year ending May 1st, 1859, is 699,991 miles. Average cost of Fuel for all purposes, except at shops, per mile run 9.75-100 cents.

The winter of 1857-8 was dry, and we had a comparatively good stock of seasoned Fuel.—The winter of 1858-59 was very wet, and we had nothing but green wood to burn on more than one half the road, which in connection with extra hauling and a probable error in estimating the consumption of fuel in the months of May, June and July, 1857, when there was no Fuel Agent upon the road, will account for the apparent increase of consumption.

OIL, TALLOW AND WASTE.

This account includes Oil, Tallow and Waste for all purposes.

The amount charged to this account is.....\$18,299 29
Amount charged to same account last year..... 18,738 17

Showing decrease.....\$438 88

The cost per mile run for oil, tallow and waste for Locomotives for the year to May 1st, 1858, was 1.34-100 cents.

The cost per mile run for passenger, baggage and freight cars was 37-100 cents.

The cost per mile for Locomotives, for the year ending May 1st, 1859, is 1.22-100 cents. For Passenger, Baggage and Freight cars is 27-100.

The mileage of Engines for the year, to May 1st, 1858, was 589,168 miles, and for the year ending May 1st, 1859, is 699,991 miles.

Showing an increase in the mileage of Locomotives of 18.81-100 per cent, and the decrease in the consumption of oil, &c., being 3.57-100 per cent, the total gain is 32.47-100 per cent.

The mileage of passenger, baggage and freight cars for the year ending May 1st, 1858 was 2,686 257 miles, and for the year ending May 1st, 1859, is 3,560,465 miles showing an increase in the mileage of 32½ per cent., and the decrease in the consumption of oil, &c., being 1.21-100 per cent. the total gain is 33.71-100 per cent. Average total gain is 28.5-100 per cent.

This saving is effected in part by the partial change we have made from inside to outside bearing trucks, by the introduction of an improved oil box, and by the preparation of our own oils, which we commenced in October, and have continued up to the present time, with results entirely satisfactory. While a step has been taken in the right direction, we are well satisfied that with a track and equipment in good order, and a better arrangement of details in the distribution of oil, a further and still more important saving can be effected in this particular branch of expenditures.

CONCLUDING REMARKS.

After a careful review of the business operations of the year, I can see substantial grounds of hope for a successful business in the future. It is true that our business when compared with that of the preceeding year, shows increased expenses beyond the increase of earnings; but the peculiar combination of circumstances which has brought about this

result, cannot in the ordinary course of events, continue to affect us. A fair rate of compensation for the Freighting business we have done, would have added over \$30,000 to our nett earnings, which would have reduced the ratio of expenses of freight receipts to 77 45 per cent. and with a return of seasons of average crops, and the usual condition of navigation in the rivers, a much larger and steadily increasing revenue may be calculated upon with entire certainty. If to this be added a track and equipment, in such good order as to command all of the business legitimately belonging to the route, and in connection such arrangements be made as to secure all practicable economy in the working of the road, I am firm in the belief that satisfactory results can be secured.

The location of the road in a sparsely settled country, the condition of the track and equipment, and financial embarrassments of the Company, have rendered it impossible to manage its business with that economy which under other circumstances, might have been reasonably expected.

Mistakes, no doubt, have been made, and all that is claimed for the management of the road, is that an earnest effort has been made by the officers, agents, and employees, for its success, under, at times, very discouraging circumstances.

ABSTRACT OF REPORT OF THE TREASURER OF THE OHIO AND MISSISSIPPI R. R.—INTERESTING STATISTICS.

Upon a settlement made with Messrs. Aspinwall and Associates, since the last Annual Meeting, based upon the Report of a Committee of Stockholders, it was found that all the second mortgage bonds had been exchanged for construction bonds, except the sum of \$258,000, and the floating debt, contracted prior to May 10th, 1856, settled, except the sum of \$120,000; a due deduction having been made for certain contingent claims and hypothecated collaterals.

Whereupon, it was mutually agreed that Messrs. Aspinwall and Associates should surrender \$258,000 of construction bonds for cancellation, in lieu of the same amount of unexchanged second mortgage bonds; also, \$294,000 of income bonds, in lieu of \$120,000 of unsettled floating debt, contracted prior to May 10th, 1856, and \$174,000, being for the redemption of a like amount of income bonds, scrip and interest, issued by the Company in settlement of like floating debt; should also settle the interest upon the first mortgage bonds to the 1st day of January, 1858—on the construction bonds to the 1st day of September, 1857—on the income bonds to the 1st day of November, 1857, and receive the note of the Company, drawing interest from the 1st day of September, 1858, for the sum of \$360,000, that being the balance agreed upon as due them on that day.

The provisions of this settlement have been complied with, excepting the payment of a small amount of first coupons, not yet presented. \$1,242,000 of the second mortgage bonds, \$258,000 of construction bonds, and \$120,000 of income bonds, have been duly cancelled of record by the Trustees, and the mortgages discharged to that extent; leaving the total amount of bonded indebtedness of the Company, exclusive of interest, \$9,800,000.

By an arrangement made with the Western or Illinois Division, for the year 1857-8, both Divisions, or the entire road of 340 miles, between Cincinnati and St. Louis, were operated substantially as one road, dividing receipts in the proportion of seven sixteenths to the Western, and nine sixteenths to the Eastern Division, that being the relative length of the two roads; but the balance for that year being found to be against the Eastern Division, in the sum of \$20,641 37, a new basis was agreed upon for the past year, of fifty-eight per cent. to the Eastern, and forty-two per cent. to the Western Division, by which the Company has regained the sum of \$10,401 41, or more than half the loss of last year.

The Capital Stock of the Company has not been increased under the present management, or since May 10th, 1856, except so far as necessary on account of original subscriptions paid up, or on account of interest due on stock, prior to January 1st, 1857, when by resolution of the Board, stock ceased to draw interest.

The present stock liability, not including \$1,000,000 pledged to the City of Cincinnati, to secure a loan of \$600,000, is \$6,384,681 00.

The gross revenue for the year 1858-9 is \$681,957 61, and the expenditures of the Operative Department, under the charge of the Superintendent, are \$614,432 64, leaving a net balance of \$267,524 97.

Of the \$174,115 43 of Income Bond Scrip Certificates and interest thereon, issued in settlement of floating debt, contracted prior to May 10th, 1856, the sum of \$124,115 53 has been redeemed by a like amount of Income Bonds, furnished as above stated, by Messrs. Aspinwall and Associates, leaving the sum of \$50,000 of scrip still outstanding—for the redemption of which there is a like amount of income bonds and coupons in the possession of the company.

Owing to large expenditures, and contracts for materials,

supplies and other purposes, made in the summer of 1857, soon after the opening of the road, in anticipation of a large increase of business, and in consequence of the general financial revulsion in the fall of the same year, a large and unexpected floating debt was incurred, which rendered it impossible for the company to pay its employees with that promptness and regularity always so desirable and essential to a successful management.

On the first day of May, 1858, the indebtedness of the Company, arising from these causes, was \$220,681 91, as reported at the annual meeting in June, 1858, and the pay rolls were three months in arrears, which, with the general distrust of all railroad engagements then prevailing, rendered the management of the affairs of the company extremely difficult and embarrassing to its officers, and unsatisfactory to all concerned.

This indebtedness has, during the past year, been almost entirely discharged. The employees of the Company are paid up, and its local credit so far sustained as not to have rendered it necessary to pay anything in the way of discounts or interests beyond the ordinary legal rates.

By the mistaken and suicidal policy adopted by Western roads, in allowing themselves to be made parties to a local contest between the four great Eastern lines, and thereby being compelled to carry freight during the best business period of the year at prices, in many cases, below the actual cost of transportation, a loss in gross receipts estimated at not less than \$100,000, was sustained by this Company for which no return has been received by it, or any other Western Company, unless the somewhat expensive experimental lesson taught shall prove such, by inducing them to adhere to remunerative prices hereafter, and allow business to seek its natural channels unrestrained. Should this be the result, a large item of expense may be saved by dispensing with the services of a class of men from whose misrepresentations, more than from almost any other cause, arise the misunderstandings and difficulties between competing routes.

By the present arrangement with the Western Division, the receipts are divided, as hereinbefore stated—an equitable division made of joint expenses, and the balances arising from our large transactions are adjusted and paid daily and weekly, so far as is practicable, and an exact settlement made at the end of each month.

CONDENSED STATEMENT OF THE REVENUE AND EXPENDITURES—1857-58.

Revenue.	
Gross Revenue in Passengers.....	\$477,469 65
" " Freights.....	223,521 07
" " Express.....	20,072 74
" " Mail.....	34,645 14
	\$755,708 60
Less, uncollected of Revenue.....	64,634 24
	\$691,074 36
Expenditures.	
Operating Expenses.....	\$462,235 07
Construction Work.....	128,838 34
Taxes, Rents and Real Estate.....	22,337 27
Office Expenses, Interest, Discounts, etc.....	41,851 01
On account of Old Floating Debt.....	17,468 97
Due from Individuals and Bills Receivable.....	3,584 00
Cash Balance in hand.....	8,759 70
	\$691,074 36

REVENUE AND EXPENDITURES—1858-59.

Revenue.	
Gross Revenue in Passengers.....	\$492,540 67
" " Freights.....	322,750 43
" " Express.....	22,099 85
" " Mail.....	44,566 66
	\$881,957 51
Less, uncollected of Revenue.....	80,966 84
	\$800,990 77
Expenditures.	
Operating Expenses, 1858-59.....	\$569,516 91
Operating Expenses, 1857-58.....	24,134 42
Construction Work, 1857-58 and '59.....	65,150 21
Bills Payable.....	80,579 00
On account of Old Floating Debt.....	8,665 95
Office Expenses, Interests, Discounts, etc.....	24,997 64
On account of Rolling Stock.....	5,184 19
On account of Materials and Wood.....	16,334 76
Due from Individuals.....	3,681 15
Cash Balance on hand.....	2,746 54
	\$800,990 77

MEETING OF DIRECTORS OF OHIO AND MISSISSIPPI COMPANY.

At the meeting of the New Board, the following appointments were made:

J. W. Alsop, *President*; W. D. Griswold, *Vice President and Treasurer*; Wm. H. Clement, *General Supt*; S. Trevor, *Secretary*.

RAILROAD SOLD.—The Chicago, St. Paul and Fond du Lac Railroad was sold last week to the first and second mortgage bondholders, for a nominal sum.

FAYETTE COUNTY R. R. CO.

In presenting their first report, the President and Directors congratulate themselves and the other stockholders upon the success which has thus far attended their important enterprise.

On the 1st day of May, 1857, the State Legislature passed the Act authorizing the formation of the company "to construct a double or single track railroad from any point in the borough of Uniontown to any point at or near the borough of Connellsville, in the county of Fayette, and across the Youghiogheny River, with the right to connect with the Pittsburg and Connellsville Railroad, at or near the borough of Connellsville." The Act fixed the capital at \$750,000, in shares of \$100. Within about ten months thereafter the amount of stock necessary to obtain the charter was subscribed, and the charter was obtained on the 13th of March, 1858. The first election for President and Directors was held on the 3d of April—the entire road put under contract in August and September, with a fair prospect of its completion by the middle of June next; thus consummating the enterprise within about twenty-six months from its earliest inception. These rapid results have been accomplished by the energies and resources of the people of Uniontown and contiguous townships, aided, as to small amounts, by a few other spirited citizens of the county in more distant localities, and a few in Pittsburg and Allegheny; but unaided by a single dollar of corporate subscription, that hitherto common basis of railroad credit;—and all this amid a period of general prostration of railroad undertakings, and of severe pecuniary pressure. When to these considerations we add the unusually small expenditure incurred for right of way, surveys and location, depot and station grounds, and, above all, the almost unexampled low cost of construction, we may safely challenge the annals of railroads in the United States to produce a parallel. Be it our anxious care to maintain this current of success until the end shall crown the work.

The law makes it our duty, on this occasion, to exhibit to you "a full and complete statement of the affairs and proceedings of the company" since its organization, "with all such matters as shall be necessary to convey a full knowledge of its condition." This duty we now proceed to discharge with all possible plainness and brevity.

The President and Directors, elected on the 3d, met for the first time, on the 7th of April last. At that time about \$80,000 of stock had been subscribed. The commissioners and agents who obtained the stock had given out the opinion that nothing decisive would be attempted until at least \$100,000 had been subscribed to the funds of the company. In this opinion the directors fully concurred: but confidently believing that that amount at least would speedily be subscribed, and that the citizens of the county interested in so important an improvement would not suffer it now to fail, the Directors at once resolved to risk, in the meantime, the expenditure of a sum requisite to make a survey and location of the route. This they deemed the more advisable, as without an actual location no reliable estimate of the cost of construction could be made. They accordingly called for the payment of one dollar on each share of stock subscribed; and engaged the services of John N. Lewis, Esq., as Chief Engineer, and of Messrs. J. Alexander Coulter and Thomas H. Lewis, as assistants, gentlemen of well known skill and efficiency, who, aided by other sub-

ordinates of unquestioned competency, proceeded without delay and with most assiduous care and industry, under the constant supervision of the President, to make the necessary examinations and surveys. No hesitation was felt in adopting the route upon which the road has been located, as being in every respect the cheapest and best, although other routes, in part, were examined. We need not here detail the route, as it is well known, and will be found fully set forth in the report of the Chief Engineer.

Having completed the location of the road to the north-east bank of the Youghiogheny River, about a mile above Connellsville, and nearly opposite—a little above—the mouth of Dunbar Creek, the Chief Engineer, aided by his assistants, proceeded at once to make careful computations of the work and estimates of the cost of construction for a substantial single track road, including the bridge over the river. His report was submitted to the board on the 12th of June, by which it appeared that the net estimate of the cost of construction, was \$103,043, to which, as in all similar cases, he added ten per cent. for contingencies, (\$10,304 30)—making in the whole \$113,347 30 as the entire cost of the Road to the north-east bank of the river at or near the point above indicated, and near to the probable point of junction with the line of the Pittsburg and Connellsville Railroad east of Connellsville. In this estimate were included the river bridge, and all other bridges, grading, cross-ties, ballasting, track-laying, iron rails at 40 lbs. to the yard, depot and station buildings and turn-table at Uniontown, engineering, etc.—every thing to complete the road ready for use, except way and water stations, right of way, and station grounds. At this time it was expected that the junction point already referred to, on the north-east side of the river, near our bridge, would be the terminus of our work in that direction; we being encouraged to believe that the Pittsburg and Connellsville Railroad Company would at once extend their road eastward so as to connect with us at that point. In this we were doomed to disappointment, as will presently be seen.

Although the cost of the work was set down at \$113,347, it seemed to be the opinion of many stockholders, and of some members of the Board, that it might be done for less; and the Board was of opinion that in any event we might, without being chargeable with imprudence, incur a debt of \$10,000 or \$15,000, and proceed to take proposals for building the road. The Board, however, paused until the actual subscriptions to its funds had reached \$100,000. This being accomplished, on the 26th of June the Board resolved to advertise for proposals to construct the work. Three days afterwards this resolution was suspended until a satisfactory arrangement should be made with the Pittsburg and Connellsville Railroad Company as to the terms of connection with their road, and for their stocking and running ours. This being secured—although the formal contracts for those purposes were not signed until the 5th of August—it was finally resolved, on the 6th of July, to issue the invitation for proposals to build the road from Uniontown to the north-east bank of the river, near the north-eastern terminus already indicated—to be opened at the office of the company, on the 9th of August. Specifications were prepared and proposals received accordingly. A spirited competition in the biddings ensued; and the bids were carefully collated and considered by the Board at repeated meetings, until, on the 11th of Aug.,

the entire contract was awarded to Messrs. Baldwin, Snyder & Cheney, gentlemen of well known experience, energy, and responsibility, two of whom at least have a large stake in the success and stability of the work. They took the contract at \$71,000, to include all the work and materials in the engineer's estimate, necessary to the construction of the road, with buildings, turn-table, etc., at Uniontown, except that the iron rails were to be paid for and furnished to them at Connellsville by the company. The length of this part of the road, including the river bridge, is about 11½ miles; and, estimating the cost of the rails therefor, at Connellsville, at \$41,600, the entire cost of that length of road, without including engineering and office expenses, salaries, etc., would foot up \$112,600. This computation includes a rail of 43 instead of 40 pounds to the yard, thereby and by some advance in the price of iron, costing about \$240 per mile more than was originally expected.

It was about this time ascertained that the Pittsburgh and Connellsville Railroad Company declined to undertake the extension of their road eastward so as to connect with us at our contemplated terminus. No alternative remained but to undertake ourselves to construct the additional mile (nearly) north-east of the river, so as to effect a junction with that road at its present terminus in the borough of Connellsville. The contracts of the 5th of August, already referred to, were preliminary steps to this additional undertaking.

Two contracts were signed. By one the Pittsburgh and Connellsville Railroad Company undertake to run our road, furnishing locomotives, freight and passenger cars—one train down in the morning and up in the evening—and pay all running expenses, for the compensation to them of one-fourth of the gross receipts of our road for motive power, and one-eighth for cars, to be computed on three cents per mile per passenger, and three cents per ton per mile on freight;—all through passenger fares between Uniontown and Port Perry, or Brinton's, to be divided by crediting to us one-fourth and to them three-fourths. Although this contract is one of mutual advantage, it is especially advantageous to us, in that their part of the roads to be run is 48 miles, or nearly four-fifths of the entire distance, and whatever rates beyond three cents we may charge on our road will redound to our own benefit. We have also the right to run an intermediate train; and either party can terminate the contract upon notice to the other, as specified in the agreement.

By the other agreement of the same date we undertake to construct an extension of our road upon the line of the P. & C. R. R. from the junction point near our river bridge to the present terminus of that company's road in Connellsville—a distance of about nine-tenths of a mile: in re-imbursement for which that company agrees to allow us to retain and receive from them the monthly balances in their favor, on account of freight and passengers, which are the joint earnings of the two roads. The road to be ours, until we are thus, or by direct payment in cash, re-imbursed; when it is to be transferred to, and be kept in good order by that company, and we allowed to run our trains upon it and connect with their trains, and use their turn-table, at Connellsville, at two cents for each way passenger, and two cents for each ton of way freight. For this work they eventually agreed to allow us \$6,977 69, besides an allowance for additional weight of rail and some extra work not included in the estimates; and to furnish us with a clear right of way.

Having obtained these contracts with that company, and having located that part of the road, including the short connecting link (660 feet) between it and our previously located line, we on the 31st of August resolved to receive proposals for its construction until the 11th of September. On that day a proposal by Messrs. Baldwin, Snyder & Co., to build it at specified rates, was received; and they have afterwards agreed to do the entire work and find all materials, except the rails, for that part of the road, for \$4,000, their bid was accepted. Adding to this the price of the rails for this section, the whole cost to us of this part of our road of a little over a mile in length will not exceed \$8,000; which, added to the probable cost of the other 11½ miles, will make the cost of the whole line \$120,600, exclusive of engineer service, salaries, and other contingent expenses.

An unforeseen item of expenditure has necessarily been incurred, in paying \$200, and assuming the payment of \$300 more, for right of way on the line of the Pittsburgh and Connellsville Railroad occupied by us. We are not without hope, however, that this default by that company will be speedily and satisfactorily remedied.

It was our intention, when we put our road under contract, to use the tubular or hollow rail, patented by Mr. Edward W. Stephens, of Covington, Kentucky, which, we think, possesses decided advantages in many respects over the solid rail; but we could not obtain it in time. We, therefore, determined to use the solid T rail of 43 pounds to the yard; and in October our President contracted for it with Messrs. Wood, Morrell & Co., of Johnstown, Pa., at this low rate, at the works, of \$47 50 per ton of 2240 pounds. The Pennsylvania Railroad Company having generously agreed to haul it to Brinton's—61 miles—at 7½ cents per hundred, (half their established rates,) and the Pittsburgh and Connellsville Railroad Company, having, in a like spirit, agreed to deliver it at Connellsville at proportional rates, (charging nothing for the quantity required to lay the nine-tenths of a mile built on their line,) the cost of the iron at Connellsville may be set down at about \$51 per ton.

About the last of December our President directed 250 tons of rails to be forwarded, on which he paid in cash, of the Company's funds, \$6,875, and gave the notes of the company, endorsed by himself and Hon. John Huston, at three and six months, for \$5,000. These notes will of course be met as they came due, out of the funds of the Company. This iron is now being delivered at Connellsville; and the contractors will, if the weather permits, soon commence laying it on the road from that point southward. It will lay about three and seven-tenths miles, so that about 852 tons of this weight of rail will be required for the entire road. A lighter rail of the same kind, or a common flat bar, may be used for sidings.

By the general Railroad Law of 1849, the shares of stock are \$50, and but \$5 a share, or ten per cent., can be called in every thirty days. Our shares being \$100 instead of \$50, we were constrained to follow the spirit of the Act of 1849, and call in ten per cent., or ten dollars a share monthly. This will make all due by the first of June next, so as to meet the final estimate for construction, etc., according to contract. And we can not but commend the general alacrity and promptness with which most of our stockholders have responded to these calls. A few hold back—some, of whom we expected better things—but we confidently trust that none will allow their default

to exist much longer, or to embarrass the company in meeting its urgent engagements. Economy and good faith concur in demanding prompt payments.

From the report of the Treasurer, herewith submitted, it will be seen that the total amount subscribed to the Company, including stock and donations, is \$101,682 50. The donations, amounting to \$1,032 50, are all now due. Of the stock, \$2,500, by special agreement, will not be payable until the road is completed, and \$3,800 more were subscribed to be paid in iron, nails, and castings, which, however, can be used or converted in the construction of the road, and in its sidings and buildings, without loss.

Excluding the donations and these special stock subscriptions, there was due and payable, up to the 31st of December, 1858, from four instalments, \$37,740; whereas only \$25,706 50 were paid thereon. If to this be added the *fifth* instalment, due January 1, 1859, then the whole amount now due would be \$47,175; whereas, including what has been paid on the *fifth* and on the *other four* instalments since December 31st, the whole payments amount only to \$29,362 50; showing a deficit on the part of the stockholders, on those five instalments, of \$17,814 50. A few of the stockholders, as shown by the report, have made payments in advance—four shares being paid in full. Notwithstanding this large amount of default, we have, thus far, been able to meet all our contract liabilities. But unless this arrearage is speedily brought up, and more exemplary promptitude is observed in the future, embarrassments will inevitably ensue; and not only vexatious delay but heavy loss in the completion of the work will have to be incurred. At least \$40,000 will yet be needed for the single item of rails, which can be bought only for cash or its equivalent, and the monthly estimates to contractors must be promptly met, or the work stop, and go, unfinished, to decay.

Out of the present resources of the company the Board believe that at least \$100,000 will be realized. Estimating the road with all its fixtures and appurtenances complete, to cost \$125,000, and adding thereto say \$5,000 for contingencies, known and unknown, at least \$30,000 more must be raised to complete the work, ready for productive use, with all its debts and liabilities for construction paid. *How will this be provided for?* This question will very soon have to be calmly considered, and fearlessly but cautiously answered. But two modes of meeting it are within our reach. One is to increase the subscriptions to our capital—the other, to borrow. Can additional stock be obtained? We fear that the effort in that line has been nearly exhausted, although it ought not so to be; for we unhesitatingly declare our belief that this kind of aid is not only the most commendable, but has in it the promise of reimbursement and profit. The borough of Uniontown has authority to our stock to an amount not exceeding \$30,000 and to issue its bonds in payment. No effort in that direction has yet been made. We believe its bonds, to a reasonable amount, with or without the Company's guaranty, could be made available. We may also issue *preferred stock*, but we consider this a refuge of the last resort, as thereby great injustice would be done to those stockholders who have borne the heat and burden of the enterprise. We would prefer to borrow, if it can be done upon fair terms. We have the power to borrow at *eight* per cent. interest, and may mortgage the road and its revenues as security. This resort will have the merit of equal justice to all the

stockholders, and of keeping the amount of stock upon which future profits may be divided within a similar limit.

Another subject of expenditure will demand our consideration upon the completion of the road. We refer to the purchase of at least two locomotives and a number of cars for freight and passengers. Waiving for the present any discussion of the relative advantages of equipping and running the road ourselves and of procuring another company to do it, there will be found to be seasons and occasions in both travel and transportation when more than one daily train will be demanded by considerations of profit and of public accommodation. These demands will have to be met by, at least, a partial equipment, of which the probable cost will not be less than \$10,000. This expenditure, although not less certain, is less immediate than the \$25,000 or \$30,000 before referred to. And as the subject is one which must early claim the serious attention of the Board in the ensuing year, we will not now further seek to forestall or anticipate its action.

While superintending the surveys and location, the President was also procuring releases of right of way from landholders on the route. And the Board is happy to state that most of the owners of land exhibited a laudable public spirit, and gave the right of way without compensation. Twenty-four releases were obtained, and others promised. Probably not more than two will assert any claim of damages; and one of these, Jesse Bunker, Esq., in the most friendly spirit, agreed to postpone the question until after the road is completed and in operation. The other, Mr. George J. Ashman, interposed no obstacle to the construction of the road through his land, by exacting previous adjustment or security. In his case, however, an assessment of damages has been made, inadequate in his estimation, but excessive in the estimation of others. We, therefore, indulge a hope, that his claim will yet be fairly and amicably adjusted. In addition to the right of way through his land in the borough and in North Union township, Mr. John Gallagher agreed to convey to the Company an acre and a half of land for a Depot, which has been located thereon. The necessary ground for a station is offered gratuitously by Col. Samuel Evans, on the Connellsville Road, north of Shute's Run; and Mr. Isaac Beeson, of Mount Braddock, and Mr. Jacob Murphey have agreed to give half an acre each on the line between them, where the road crosses it, and where, it is believed, a station will be required. Another station will be needed at or near Speer's Mills, where, no doubt, the necessary site will be cheerfully given. The fruits of all these cases of liberality and public spirit are to the stockholders the obtaining of rights and accommodations which have usually cost, in like cases, a large expenditure.

A code of By-laws and Rules for the regulation of the business and duties of the corporation, has been adopted by the Board, which is herewith submitted. They are subject to change or amendment by the Stockholders, at this or any other regular meeting.

It is no part of our duty on this occasion to exhibit any opinion or estimates of the probable revenues of our road after it shall have been completed. But despite much croaking to the contrary, engendered by the general failure of similar enterprises around us, we hesitate not to announce it as our most considered belief that if we can prevent the workings of the road from being crushed by a load of debt beyond its capacity to bear, and can,

as we confidently trust we will, complete and manage it with economy and prudence, it will very soon be a dividend paying road. It will be doing our work great injustice to compare it with partially finished roads, built upon bad locations, costing three or four times as much per mile to construct them, dependent for business upon but one single resource, agricultural or manufacturing, and having their termini at places of but inconsiderable importance. *Such is not our case.* And without descending to the specific data upon which we base the statement, we say, that taking the trade and travel of the country within the sphere of the road's influence, *as it now is*, we can not compute the gross earnings of the work at less than \$1,200 per month. Setting apart \$6,000 per annum as a liberal average allowance for all expenses of running and taking care of the road—(although probably for the first two or three years more will be required,)—this would leave \$8,400 to be applied to dividends or debts, which is *six per cent.* upon \$140,000, the estimated cost of the road and its equipment.

The gross revenues of the Pittsburg and Connellsville Railroad, for the last year—the first of its existence as a through road, and the worst year in the last decade for railroad business; notwithstanding the drawbacks of its incomplete condition on its Pittsburg end, and its coming in direct competition with slack-water navigation for half its route,—exceeded \$48,000; being over \$1,000 per mile, or \$4,000 per month. Were that work completed to Pittsburg, at least 50 per cent. would be added to its revenues. And were it completed to Cumberland, so as to bring us and the wide scope of country which our road will serve, into direct and ready access to Baltimore, this revenue would, we think, at once be doubled. And we are not without hope that that completion will be effected at no distant day. But aside from this, the completion of our road will, of itself, work a gradual but sure increase of business upon its line, and within the orbit of its accommodations; so that even if other improvements stand as they now are, disjointed and incomplete, our business may and must within a few years be largely increased. Take Monongahela Slack-water Improvement as an illustration. Its length from Pittsburg to Brownsville is 56 miles—upon which it has four Dams, with their Locks, each costing more than our entire road, and idle, on an average, three months in the year. Yet within eight or ten years after its completion to Brownsville it was enabled not only to yield several cash dividends, but to double its stock in the hands of holders; so that what cost originally \$50 became worth \$100. Its business and revenues are steadily growing, notwithstanding its predicted failure upon its ceasing, a few years ago, to be the grand highway of trade and travel for one quarter of the Union. In 1848 its receipts were \$56,624; last year they exceeded \$73,000. In view of so signal an illustration of the value of a public improvement in a country *having large capacities for surplus production*, we say to our Stockholders, be of good cheer—the investment will not be a boon or a failure. Its surest advantage, however, will be in the activity, enterprise, and improvement which it will diffuse, and infuse into all our pursuits, agricultural, mechanical, manufacturing, and professional. It will stimulate the development of the yet untold capacities of our soil to produce, and bring to light and life the buried treasures of our hills and our mountains. It will lift us up as a community from the depths of inert-

ness into which we have fallen. It will arrest that feverish discontent with our lot, and restless anxiety to remove, which, for the last ten years, has hung over us like a pall; and will put us as a producing people upon the proud pre-eminence which the God of Nature designed we should occupy when he gave to us the inestimable treasures of soil, water, climate, timber, coal, and iron by which we are surrounded—treasures which we are bound, as subjects of His Empire, to appreciate and develop by the use of all the means which He has placed within our power. Duty, therefore, unites with interest in not only making us content with what we have done, but in inviting us to still further exertions in favor of the road.

OFFICERS.

Hon. Nathaniel Ewing, *President*; John N. Lewis, *Chief Engineer*; J. Alex. Coulter, *Assistant Engineer*; S. D. Oliphant, *Secretary and Treasurer*.

DIRECTORS.

Alfred Patterson, James Veech, Redding Bunting, Alpheus E. Willson, Henry W. Gaddis, Isaac Skiles, Jr., James Robinson, Jacob Murphey, Samuel A. Gilmore, Isaac Wiggins, Isaac Beeson, Daniel Kaine.

PACIFIC RAILROAD.

Speech of the Hon. Jefferson Davis, of Mississippi, on the Pacific Railroad Bill, delivered in the Senate of the United States, January, 1859.

(CONTINUED.)

Leaving the northern route, I pass to the *route of the forty-first parallel*, which has been described in the Lenate as having peculiar advantages. From the Great Salt Lake to the Sierra Nevada, the country on this route consists of alternate mountains and plains, or valleys—plains utterly barren. The Office Examinations of the railroad explorations state that:

"The greater part of the surface of these valleys is merely sprinkled by several varieties of *s. mure* artemisia, (wild sage,) presenting the aspect of a dreary waste; though there are spots more thickly covered with vegetation, yet the soil is seldom half covered with it for a few acres, and is nowhere suitable for settlement and cultivation. Immediately west of Great Salt Lake, there is a desert plain of mud, clay, and sand, impregnated with salt, seventy miles in width from east to west, by its longest line, and forty at a narrow part, further south.

The following extracts from Captain Beckwith's own Reports, exhibit the general character of the soil over a large portion of this route, and fully sustains this statement of the revising officer:

"The western range of the Wahsatch mountains, standing on the eastern border of the Great Basin, is continuous, extending north and south over five degrees of latitude, from the vicinity of Little Salt Lake to north of Bear river, broken only by the passage of the Sevier, Timpanogos, Weber, and Bear rivers. * * * Its western slope is very steep—often inaccessible—presenting, generally, a formidable barrier to the entrance of a railroad into the Basin from the east. Many small streams descend from it; and as far as its disintegrations have been deposited at its base upon the alkaline plains of the Basin, it forms a rich soil. This line of deposit is narrow and not continuous, but varying in width, where it is found, from two or three miles to ten or twelve at a few points, as opposite Utah and Great Salt Lakes, where it occupies the entire space from the mountain to the Lake shores. It is in this narrow belt of land that the Mormon settlements are almost exclusively confined, the isolated settlements being upon similar deposits, in small valleys, at the base of other mountains, the small mountain streams upon which these deposits are the richest, and chiefly exist, being used for irrigation."

The Mormon community eagerly seek for, and occupy, small tracts of cultivable soil, if sufficiently large to support a few families, even though at great distances from the main settlement.

"From the western shore of Great Salt Lake to the valley of Humboldt river, the country consists alternately of mountains, in more or less isolated ranges, and open, level plains. * * * Cedar mountain lies immediately on

the southwestern shore of the lake, and gradually subsides towards the north, terminating in Strong's Knob. * * * Immediately west of this range there occurs a desert plain of mud, about seventy miles in width from east to west, by its longest line, which becomes narrowed to forty, and eventually entirely disappears as it extends southward—less than thirty of which is miry by this line—and it is firm in proportion to the distance from the lake." * * *

Describing this desert where the party crossed it, he says:

"For this entire distance there is not a sign of green vegetation, (May 13th,) and only here and there a dry stalk of artemisia, where it has been transported by the wind. The lightest sheet of effloresced salt covered the moist earth at intervals, and the track of a single antelope or wolf could be seen crossing the desert for miles by the line of dark mud thrown up by its feet, so level, white and soft was the plain; and the whole scene was as barren, desolate, and dreary as can be imagined. Fortunately, the sun was partially obscured during most of the day; but even with the obscurity its reflection was very painful to the eyes, which were materially relieved, however, by one or two light passing showers, which dissolved the salt upon the plain, but greatly enhanced the fatigue and labor of crossing it."

At the encampment that night, after crossing the salt mud desert, he says:

"We were soon visited by a number of the expected guests, extremely filthy and very naked, and emaciated by starvation during the long winter, during which their supply of rats and bugs fail, and they are reduced to the greatest extreme of want, if their appearance truly indicate it; and they are, doubtless, among the lowest of the human race in intelligence and humanity."

Describing Fish Creek Valley, he says:

"May 15.—The valley is here several miles wide, and the stream lined with grass, which is not all, however, of a superior quality. Many of the small settlements of Utah are not so well supplied with the requisites for successful cultivation as those found on this stream, on which we found a band of twenty Shoshone Indians encamped, besides women and children. They are mounted, and contrast strikingly with their Goshoot neighbors in the plump condition of their persons, although they complain of hunger, &c. * * * Our Indian guides left us here, as we were approaching the western line of their territory, and we endeavored, unsuccessfully, to obtain one from the Shoshones to accompany us—their perfect knowledge of the country being of great service in designating the points at which water and grass can be found."

"May 16.—Leaving camp, we took a west course by the shortest route we could discover, leading to a favorable passage of the low mountains in that direction. The country was at first gently rolling, but soon became more broken and hilly, and covered with an unusual growth of cedar—artemisia covering the whole surface of the country, and the soil was light and dusty."

"May 18.—Last night was cold, freezing the surface of the ground to the depth of a quarter of an inch. Altitude, 6,550 feet. Leaving camp at sunrise, we continued down the dry bed of the creek for a short distance, but leaving it as we entered the valley, in which our course changed more to the north, for the purpose of passing around the north end of the succeeding mountain. The road was dry and hard, and the artemisia which covered the whole face of the country, small."

Describing the large valley lying at the eastern base of Humboldt mountains, sixty miles in length and twenty in width at the widest part, he says:

"May 20.— * * * It is the most fertile valley known to exist in the center of the Basin. Numerous streams descend into it from the elevated range of the Humboldt mountains, all the crest of which for a thousand feet below its summit is still buried in snow. To the largest of these streams I gave the name of Franklin river. It rises by the union of several small streams in the pass by which it is proposed to cross the mountain with the railroad, descends to the east to the base of the mountain, and thence flows south for many miles, forming the most considerable lake in the valley, of which there are several, but none of great extent. The lakes are surrounded, and all the streams are lined, with extensive meadows of coarse, tall, luxuriant grass; and the water, so far as we could ascertain, at least at this season of the year, is fresh, but near the lakes has a strong taste of decaying vegetation. The richest of the lands are, unfortunately, too low and wet for cultivation to their full extent; otherwise it would furnish lands for a respectable settlement. * * * We rode for several miles in a due west course from this pond, although this course would bring us directly to the base of the mountains, where there is no possibility of crossing them; but the width of the plain is such * * * that it is necessary to be sure of finding water and grass for our animals at night, which we could not fail to do at the foot of the snowy range we were approaching, although it increased the distance to travel beyond what it would otherwise have been. But in the middle of the plain we came upon Franklin river, the channel of which is thirty feet wide at present, and it has everywhere overflowed its banks; but in midsummer it is doubtless a small stream. * * * We encamped on the banks of the river, which are destitute of timber, but sage furnishes abundant fuel."

The route here enters the pass of Humboldt mountains, and crossing them, descends to the valley of Humboldt river, Col. Fremont's description of which Capt. Beckwith quotes:

"The country through which it passes (except its imme-

diate valley,) is a dry, sandy plain, without grass, wood, or arable soil. * * *

Its own immediate valley is a rich alluvion, beautifully covered with blue grass, herd grass, clover, and other nutritious grasses, and its course is marked through the plain by a line of willow, * * * serving for fuel." Lieut. Beckwith adds: "June 8th.—Willows line the stream in many parts, but trees are no where seen on the Humboldt. Its water, even at this season, is not superior, and becomes less so as you descend it, and as it subsides after the spring rise. It is now 40 yards wide when all collected in one channel, and eight feet deep, flowing with a moderate current. There are no fish in this part of it larger than minnows."

"June 9.—We moved camp but 6.80 miles down the river to a point selected for crossing it, where it has no bottom land upon it. These low lands being very much overflowed at this season, and miry, are entirely impassable for horses or cattle; and many arriving here in a weak condition, are annually lost by emigrants from becoming mired. But one of the chief causes of the loss of cattle by emigrants upon this stream, is allowing them to eat the grass in the river bottom, which is extremely unwholesome. The more experienced stock drovers to California, send their cattle back from the river to feed on the nutritious grass of the hills; but, as these are frequently distant from the road and from water, it is only by experience that men learn its importance."

"The country to the south of this valley (of Humboldt river) consists of an alternation of narrow mountains and valleys rapidly succeeding each other. * * * They (the mountains) are sharp, rocky, and inaccessible in many parts, but are low and easily passed in others. * * * They are liberally supplied with springs and small streams, but the latter seldom extend far into the plains. At the time of melting snows they form many small ponds and lakes, but at others are absorbed by the soil near the bases of the mountains. Grass is found in abundance upon nearly every range, but timber is very scarce, a small scattered growth of cedar only being seen upon a few ranges. * * * The valleys are much less fertile than the mountains, but generally support several varieties of artemisia, relieving them from the character of barrenness or desert. There are, however, many barren spots in each of these valleys, and the soil is seldom one-half covered with vegetation, even for a few acres, while the great mass of it is merely sprinkled by the sombre artemisia foliage, presenting the aspect of a dreary waste, unrelieved by inviting shades, grassy plats, and floral beauties, and is nowhere suitable for settlements and cultivation."

It will be noticed that Capt. Beckwith applies the words "barren" and "desert" only to soil destitute of any vegetation whatever.

"From Humboldt river, there are three lines which may be followed to the foot of the Sierra Nevada. * * * The fertility of this section corresponds with that of the line south of Humboldt river."

Returning to June 8. "The valley of the Humboldt, as seen here, is eighteen to twenty miles wide, its soil very light and friable, with extensive districts of sand, more or less covered with the several varieties of artemisia, which occupy so large a proportion—at least nine-tenths of the plains—of our territory between the Rocky and Sierra Nevada mountains and characterize its vegetation."

He thus describes the cañons which are necessary to be passed on this route. He says:

"For ninety-six miles below the mouth of Canoe creek, to seventeen miles above Fort Reading, the course of the Sacramento lies entirely through heavily timbered mountains, which rise precipitously from the river banks to the height of from fifteen hundred to two thousand feet above the stream. Its course is winding, with all varieties of curves greater than a right angle, and it is seldom entirely straight for two miles consecutively; but its general courses are more uniform."

"The foot of the mountains along the stream is often obstructed by fallen rocks to such an extent as to prevent its passage on horseback; and it is also obstructed by fallen timber and dense thickets of brush."

"At many points, but for short distances only, the way is obstructed by rocks in place. The road will require to be carried on the side of the mountains, a few feet above the stream at high water, throughout this entire section to the open valley of the Sacramento, whence it can be continued on the open plain."

What, think you, is it to cost for that side cut, ninety-six miles in length, with stone a greater part of it not in place, and therefore liable constantly to slide in on any road which may be constructed, any excavation which may be made. He goes on to describe this region of country, he says:

"The two canons of the Sacramento, fourteen and nine miles in length, and the very sinuous course of the river for the space of ninety-six miles through heavily timbered mountains rising precipitously from the stream, form the principal characteristic unfavorable features of the route; the cost of constructing a railroad along which can not be properly estimated until minute surveys are made."

There is something very peculiar in this route. Instead of finding the Sierra Nevada rising with a sharp back-bone, as was expected, viewing it from the east and west, always rising and presenting a sharp ridge against the sky; instead of finding it as it was sup-

posed to be, a mountain, a single crest which might be passed by deep cutting or by tunneling, it turns out to be a great plain, forty miles wide, having its own little streams and lakes, lying between two ridges of mountains which rise upon its two sides like parapets to guard it. It is the ascent and descent over the ridges which bound this plain that constitute the immense difficulty. It was, therefore, that the engineer, with great discrimination, having ascended this plain, looked for a stream along which he might descend from it. He struck the fork of Pit river, followed its course, and passed through this cañon of ninety-six miles as the most practicable mode of descending from his elevation, some five thousand seven hundred feet, to get upon the plain of the Sacramento, as it lies at Fort Reading. What the grade will be on some of the descents, I do not know. I think it could have been ascertained if the profiles had been published; and here I will mention, in connection with the publication of the railroad reports, a fact, that I deem it proper in this place to notice. When the explorations were sent in, when the maps were prepared, and after delay had worn out my patience in waiting for them to be engraved, an estimate was sent to Congress of the amount it would cost to engrave them, in order that an appropriation might be made to permit the War Department to have the work executed. When that came before Congress, they chose, in their kindness, to make the appropriation, but to leave it in the hands of the Superintendent of Public Printing. *Those maps have not yet been engraved, the part of them which has been engraved has not yet been printed*, and the country is deprived of the profiles and detailed maps which would have served to give them that clear understanding of the geography of this region, which must have relieved the Senate from so much imaginary construction of the face of the earth.

But I have been told that this route which was surveyed is not the one which is meant; that instead of going through these cañons of the Sacramento, some insist that the descent should be directly to Fort Reading. This, of course, includes some lifts where the grade would be vastly greater, but the difference of elevation between the crest of the ridge over which you descend to the valley of the Sacramento, and Fort Reading, calls for an average grade of one hundred and thirty feet per mile for forty-five miles; the space which you have to overcome this descent. Therefore, I say, it was wise in the engineer; seeing how close he had come upon the valley, and how great was his elevation, to seek some stream by which he might circuitously locate the railroad to the valley, at Fort Reading, even although he had to follow these tremendous cañons.

In connection with the passage of these mountains, I have had the good fortune to get some information from a report of the surveyor-general of the State of California, being the first reliable information we have in relation to the route that passes through what is called Carson's valley. It will be remembered that that was not crossed by either of the exploring parties, and it may be well for me here to state the reason. The party going west, commanded by Capt. Beckwith, finding their resources nearly exhausted, instead of attempting to cross from Carson's valley over the mountains, upon satisfying themselves that it was impracticable for a railroad, turned north to find some better line. They had heard of Noble's Pass. They examined it, and found that it was nearly, if not quite, impracticable for a railroad. They went on to another, the Madelin Pass, where they found the easiest grade

which that chain of mountains presented. Anxious, however, to satisfy the public, and fully discharge the duty imposed upon me, another party on the Pacific was subsequently directed to make that exploration across the line of travel into Carson's valley. The party was detained in the examination of the range near Des Chutes valley until November, and then found the snow so deep in the mountains that they were compelled to abandon the attempt to cross over into Carson's valley. Therefore it was, that until this report of the surveyor-general of the State of California was obtained, we had no positive information; though already the conclusion was inevitably reached, that if in November the mountains were covered with snow so deep that the engineers could not explore them, it was useless to inquire whether a railroad could be constructed there or not. This report of the surveyor-general, however, puts an end to all further speculation on the subject. He gives the elevations passing over by two routes, one of which is called Johnson's Cut-Off, and the other the Old Route. I refer to his report, printed in 1856. The distances and elevations are according to a survey made in 1855, by an engineer named Goddard.

I know nothing of the character of the engineer or the surveyor-general. My opinion in relation to the engineer, however, is favorable, from the work which he presents. It seems to hold together very well. It appears that in sixty miles to the junction of these two roads, Johnson's Cut-Off and the Old Route, you gain an elevation of four thousand feet. On the latter it is forty five miles thence to the summit, an altitude of nine thousand feet, the average ascending grade being one hundred and eleven feet. You may generally double an average grade in a rolling country. By Johnson's Cut-Off it is thirty six miles to the summit; the altitude is six thousand seven hundred and fifty feet, which would give an average ascending grade of eighty feet. To descend from the summit to Carson's valley by the Old Route, requires an average descending grade of two hundred feet per mile for twenty-one miles; and by Johnson's Cut-Off, an average descending grade of one hundred and forty feet per mile for twelve miles. The descent and the ascent upon both these routes, doubling the average grade, show that it is impracticable to run a railroad otherwise than by stationary engines, and, therefore, that it is better to attempt the construction through the Pit river cañon than to cross this mountain, unless it be by a tunnel. There is no estimate for the cost of that. I think the examination was rather for a stage road, for which the pass was found practicable and highly useful, and no authority, therefore, by which to estimate the expenditure required to construct a railroad over the mountains at this point.

In relation to the climate of this route, I would say that I believe it to be worse than that on the forty-ninth parallel; that there is more snow upon the line, and occasionally as intense cold; that the liabilities to loss of life, and interruptions to the working of a road, are greater upon it from cold and snow than they are upon the forty-ninth degree of latitude.

Captain Stansbury, who passed the winter of 1849-50 in Great Salt Lake City, says:

"I had hoped, from the representations which had been made to me of the mildness of the two previous winters, that we should be able to keep the field the greater part, if not the whole, of the season; but, in the latter part of November, the winter set in with great and unusual severity, accompanied by deep snows, which rendered any further prosecution of the work impracticable."—(Page 120 of Report.)

"The winter season in the valley of the Great Salt Lake

was long and severe. The vicinity of so many high mountains rendered the weather extremely variable; snows fell constantly upon them, and frequently to the depth of ten inches in the plains. In many of the cañons it accumulated to the depth of fifty feet, filling the passes so rapidly that, in more than one instance, emigrants who had been belated in starting from the States were overtaken by the storms in the mountain gorges, and forced to abandon everything, and escape on foot, leaving even their animals to perish in the snows. All communication with the world beyond was effectually cut off; and, as the winter advanced, the gorges became more and more impassable, owing to the drifting of the snow into them from the projecting peaks."

"We remained thus shut up until the 3d of April."—(Page 122)

One Senator has informed us that the *thirty-seventh parallel* is the proper location, and insists on running a road straight across the country on that line. This is an old story. We used to have the road running straight across on this parallel and over a very level country; which level country, when subjected to instruments, proved to be ten thousand feet above the level of the sea, with tunnels of such length as no man yet has ever undertaken to cut. I had supposed that the reports of the engineers had convinced every one of the impracticability of the route. They speak with sufficient plainness to render any discussion of the physical obstacles unnecessary, and I will only refer to some additional evidence in relation to the climate of this region not drawn from railroad reports, of which, perhaps, Senators are growing somewhat weary. I refer to the report of Captain Marcy, of the recent expedition which he made near this line, trying to find his way down into New Mexico. He says, in his letter dated "Taos, New Mexico, January 23, 1858," describing his route:

"For two hundred miles I encountered from two to five feet of snow, requiring great labor on the part of the escort to break a trail for the animals, and for several days I only marched about three miles per day. In consequence of this, my rations were consumed ten days before I reached the valley of the Rio del Norte, and it became necessary to subsist my command upon mules that became exhausted and could perform no further labor."

The exposure and loss of his party encountered by Colonel Fremont in the same region of country are well-known, and must be remembered by the Senate. Captain Marcy, in his letter to Major Porter, dated June 12, 1858, describing the expedition already referred to, says:

"Our trace is along the valley of the Grand river to the junction of the Bunkaree and Compadre, both of which we forded, and ascended the latter about fifteen miles. We found no snow in these valleys, and the atmosphere was mild, with much of the grass green."

"Several lodges of Utah Indians were met with upon the Compadre, who informed us that the major part of their band had gone to Snake river upon a buffalo hunt, and had taken with them nearly all of their best horses. I held out every inducement to persuade them to sell some of the remaining ones, but did not succeed in purchasing one."

"They seemed to be amply supplied with rifles and blankets, which they said had been presented to them by their agent, in New Mexico. I also made an effort to hire one of them to accompany us as a guide, as far as the 'Coo-che-to-pa' Pass, supposing he would know the best route to avoid the deep snows; and, as an inducement, I offered him the value of two horses; but he most peremptorily declined, saying 'the snow was very deep in the mountains; that we would all perish; and that, for his part, he was not disposed to die in that way.' He also said that it would be much more wise for us to turn about and go back, or stop and winter with them."

"Our interpreter replied to him that we were men, and not old women; that we intended to go on, and had no fears for the result."

"On the 23d day of December, we left the valley of the Compadre, and taking a south-east course, entered the mountains, where we at once encountered snow, which increased in depth as we ascended, and upon the top of this was a hard crust, that cut the mules' legs severely, and greatly augmented the difficulty in traveling."

"On the 24th the snow had become so deep that, finding it impossible for our jaded animals any longer to break the track, I placed forty men in the advance who waded slowly through it, alternating from front to rear as they became exhausted, and in this manner a path was beaten over which the pack mules with difficulty passed. The snow continued to increase in depth as we advanced, but the men struggled most manfully on. They were cheerful, and there was not a word of complaint from any one of the soldiers." * * *

"We then followed slowly on until the 31st, making about five miles a day. This brought us to a small creek which our guide informed me had its rise on the Coo-che-to-pa Pass. Here we had the misfortune to encounter a snow storm which added about fourteen inches to the heavy body of snow already upon the ground, and increased very greatly the difficulty of breaking a track through it."

"The following morning dawned upon us with gloomy auspices, far from promising a happy new year; yet we struggled on, and by the severest toil made about two miles during the entire day. The snow was now from four to five feet deep, and the leading men were obliged in many places to crawl upon their hands and knees to prevent sinking to their necks. They could only go a few yards at a time before they were compelled in a state of exhaustion, to throw themselves down, and let others take their places."

He goes on to describe the suffering of his men; but I have read enough to show that this is a country where the climate alone creates such difficulty that I presume no one, speaking understandingly on the subject, would say it was a route fit for a railroad. He says further.

"The route we passed over, from Camp Scott to the valley of the Rio del Norte, traverses for almost the entire distance a very broken and mountainous region, over which I regard it as wholly impracticable to carry a wagon road without the expenditure of a vast amount of labor. It would, however, be a good route for summer travel with pack mules, as grass, water, and wood, are abundant upon the whole route. The estimated distance from Camp Scott to Fort Massachusetts is five hundred and ninety-three miles."

This is in the region of country where the Senator from New Hampshire [Mr. CLARK] proposes to run this road as the only line which he could favor. In order that I may not have been misunderstood in the heights of the passes, I will repeat that the altitude of the pass El Sangre del Christo is ninety-four hundred and nineteen feet; and that of the Coo-che-to-pa, ten thousand and thirty-two feet. Here we find a party of soldiers compelled to relieve each other, to crawl on their hands and feet, in order that they might break the snow sufficiently for the pack mules to follow.

(TO BE CONTINUED.)

☛ The Illinois Central Railroad Company have received favorable advices in regard to the progress of their financial scheme which proposes the payment of the remaining \$40 per share on their stock. The Freeland bonds were in demand at 86, for the purpose of making this payment.

☛ The citizens of Nashville voted, Saturday, on the subscription of \$273,000 to the Nashville and North-western Railroad in three yearly installments. The proposition carried by a vote of 1,280 to 759.

☛ The May earnings of the Cleveland and Toledo Road were \$55,112. The first week in June gives a slight increase in passenger earnings, and a slight decrease in freight earnings.

☛ THE WEATHER AND THE CROPS.—Our section of country, after a drought of several weeks duration, has within a few days, been blessed with refreshing and repeated showers of rain. From every portion of our district we hear of fine rains, and that the crops are rapidly recovering from the effects of the backward Spring and the dry weather. Since the rain, the weather has been mild and exceedingly favorable to the growth of vegetation. We hear flattering accounts of the wheat crop, which is now nearly matured; a fine yield is expected.—*Lancaster Ledger*.

CHERAW AND COALFIELDS R. R.—It affords us much pleasure to be able to state that the preliminary survey of the Cheraw and Coalfields Railroad has been commenced, under the general direction of Mr. S. S. Solomons, Engineer and General Superintendent of the Northeastern Railroad. The field operations will be conducted by Mr. T. D. D. Lee, Engineer, assisted by our townsman, Mr. James C. Coit. Several lines will be run preparatory to a selection of the route.—*Cheraw Gaz.*

MONETARY AND COMMERCIAL.

There has been no serious change in money matters since our last, the only disturbance being the great influx of Missouri Bank notes, creating a sort of distrust that all was not right. We trust that the Missouri Banks will make some arrangements whereby their credit will be fully re-established, and that a full and frank statement of their affairs, will show the fears entertained to have been unfounded. The demand for money continues moderate, and is promptly met at regular rates.

In Eastern Exchange there has been an advance during the week, the ruling rates being $\frac{1}{2}$ prem. buying, and $\frac{1}{4}$ prem. selling.

Relative to the Foreign Money Market, and the drain of gold to Europe, the *New York Courier and Enquirer* of Monday, says:

The work of revulsion will now be felt mainly in Germany and Austria. At Vienna the rate of Exchange on London is about *forty-five per cent. premium*; being the difference between the irredeemable national currency of Austria and specie funds in London.

The London Times of the 19th says:

"The mercantile letters from Germany state that business of all kinds continues in suspense, owing to the general political excitement. The Diet at Frankfurt are expected to decide upon the attitude to be assumed by the Confederation, and the event is waited for with great anxiety, some persons being disposed to expect that an army of observation will be ordered to the Rhine. The recent approaches toward an understanding between Austria and Russia are likely, however, to have considerable influence in modifying any resolutions that may have been intended."

The demand for specie for export to the East continues. The last steamer for Alexandria carried out £338,000, of which £344,000 was in silver. The produce of the Mexican silver mines, some 25 millions annually, is thus absorbed by India and China.

In the London Markets a decline was reported in the rates of Exchange on St. Petersburg, Spain, Portugal and Naples.

The two steamers, *City of Baltimore*, for Liverpool, and *Vanderbilt*, for Southampton and Havre to-day carried out \$2,252,664 in Specie. There are indications that the extraordinary foreign demand for Gold will soon cease. Money has again become abundant in the London Market, so that no material aid will be further desired from this quarter.

If our Banks had the privilege of exacting from their customers the market rate of interest on loans, as is allowed in London, the demand for money would lessen; borrowers would not pay the increased rates. Here is a marked contrast in the two cities, to which our legislators should give attention.

The heavy remittances of exchange lately have been mainly on account of Dry Goods importations of the last eight months. An impression has prevailed in some quarters that in consequence of the low rates for money in our market from July last to April, there had been a material lessening of foreign indebtedness on the part of our importers. From what we can learn this is not really the case. The large importation of these goods have, we think, been as much the cause of a tight market, as the unexpected demand from Europe for Gold.

The papers and letters received to-day from England via Boston, have had a good effect upon our own market. The financial storm, so far as regards Western Europe, and England particularly, seems to be, in a great measure, over. We believe there has been nothing like it in the annals of Europe during the past hundred years. The closing week of April, 1859, will long be remembered as the most momentous, in a financial point of view, of the nineteenth century. A fall of 5 per cent in Consols and a still greater fall in miscellaneous securities, in one week only, producing seventeen stock failures in one day, mostly of firms hitherto considered wealthy, and a rise of two per cent on the bank rate of interest, may well be recorded as indicating a commercial prostration. The decline in the value of English funds alone in one week was equivalent to two hundred millions of dollars; the fall in railroad securities and in foreign loans in the English market, &c., was fully four times as great, making an aggregate loss in one week, equal to ONE THOUSAND MILLIONS OF DOLLARS, in market values. The total decline of Consols in April was 9½ per cent. This, be it remembered, was the English market only. France was still more disturbed in her commercial and financial circles. Credit Mobilier shares fell 25 per cent., sales as low as 500 francs per share. Bank of France shares 10 per cent. on a capital of 36 millions of dollars. French Government Securities 10 per cent. All this be it observed, was merely the result of panic. There was no real ground for such a sudden revolution—exceeding largely that produced by the Rebellion of 1745; the American Revolution; the failure of the Bank of England in 1797; the return of Napoleon in 1815; the Commercial revulsion of 1819; the French Revolution of 1830, or the famine year of 1847.

France undertook a vast importation of gold from England, to bolster up a market a few years since; an experiment that cost millions of dollars. The same game has been played on a small scale in Wall street within the past thirty days. Bankers in the French interest have been employed to negotiate (as before in London) bills at sixty days, selling them under the market, with injunctions, we may readily infer, to place the proceeds in gold on board the steamers for Europe. Neither the Government of France, nor the Bank of France, knew how far the drain of capital would

occur in the support of a war and affect the cash resources of the nation. Hence the apparent necessity for succor from abroad. First class bills on London have been sold in this market during the month of May, at $\frac{1}{2}$ to $\frac{3}{4}$ per cent. below the market, a thing unknown to our oldest bankers. Upon minute inquiry this week, we learn that such a difference was never known before. Certainly not within the past twenty years, during which foreign exchange has assumed a very important phase in our financial system.

THE AMERICAN RAILWAY BUREAU is the name of an association that has recently been organized at No. 19 Nassau St., N. Y., for the collection of information respecting every railroad in the United States and Canada. To this end, about one hundred competent Engineers are now engaged in making a critical examination of all the railroads of the West. Their reports, as well as those of the agents and correspondents in every important point, will be placed on record for the inspection of all persons interested in bonds or stocks. This Bureau will prove of great importance to all persons interested in railroads, and we wish it great success.

FREEDOM IRON COMPANY,

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods,

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Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't.

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works. June 9.

WOODRUFF'S PATENT SLEEPING CARS.

AS NOW RUNNING ON THE LAKE SHORE AND LITTLE MIAMI RAILROADS.

The attention of Railroads and Private Parties is respectfully called to this new and much desired improvement in Railroad Cars.

Any information that may be desired, can be obtained of the undersigned owners of the Patent.

T. T. WOODRUFF & CO.,
1714 Brown Street,
Philadelphia.

New Time Table

OF THE

NEW YORK CENTRAL R. R.

Leave Albany.			Arr. Buffalo.			Arr. S. Br.		
Steamboat Exp.	7 00 A. M.			7 00 P. M.			7 00 P. M.	
Mail	9 00 A. M.			12 50 A. M.				
New York Exp.	11 15 A. M.			9 00 P. M.			9 00 P. M.	
Night Exp.	5 00 P. M.			4 00 A. M.			4 00 A. M.	
Utica Accom'n.	6 00 P. M.		Ar. U.	10 00 P. M.				
N. Y. Mail	11 15 P. M.			10 00 A. M.			10 00 A. M.	
Leave Buffalo.			Leave Bridge.			Ar. Alb'y.		
New York Exp.	5 15 A. M.			5 15 A. M.			3 30 P. M.	
Steamboat Exp.	8 00 A. M.			8 00 A. M.			8 00 P. M.	
Mail	11 15 A. M.			11 00 P. M.			2 30 P. M.	
Cleveland Exp.	6 00 P. M.			6 00 P. M.			4 40 A. M.	
Cincinnati Exp.	11 00 P. M.			11 00 P. M.			8 30 A. M.	
Utica Accom'n.	11 00 P. M.						10 00 A. M.	

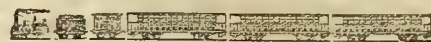
AMERICAN AND FOREIGN PATENT AGENT.

THOMAS D. STETSON,
SOLICITOR OF PATENTS,
And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

April 11, 1859.

Cincinnati, Hamilton and Dayton,



RAILROAD.

FOUR TRAINS

LEAVE THE SIXTH STREET DEPOT DAILY.

TRAINS RUN THROUGH TO RICHMOND, LIMA,
SANDUSKY, AND DELAWARE WITHOUT
CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND NORTH-WESTERN CITIES.

6 A. M. EXPRESS TRAIN—For Cleveland and Pittsburg, via Delaware, makes close connection at Crestline for Pittsburg, Baltimore, Philadelphia, and New York; and at Cleveland for Dunkirk, Buffalo, Boston and New York. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Munice. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

8 A. M. MAIL TRAIN—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STEAMER FOR DETROIT; at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at Delaware with the C., C. and C. Road, for Cleveland and points East.

4:30 P. M. TRAIN—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Connects, also, at Dayton for Troy, Piqua, Sidney, Lima and Chicago. Also connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago.

6 P. M. TRAIN—For Dayton and all way stations.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; No. 3 Burnet House; or at the Sixth Street Depot.

D. McLAREN, Superintendent.

TO THE LADIES.



THE BOUDOIR

Double Thread Sewing Machine.

THE BEST AND CHEAPEST

Double-thread Sewing Machine ever offered in the Cincinnati Market.

This Machine possesses advantages over any thing now in use.

Office in Melodeon Building, corner Fourth and Walnut, up stairs.

Agents Wanted in the West and South.

Send for Circular. Address,

W. E. Braman & Co.

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO., cor. Fourth and Walnut Streets, second floor, Cincinnati, Ohio.

BRANCH OFFICES:

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Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a *new style*, working upon the same principle, and making the same stitch, though not so highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being ALIKE ON BOTH SIDES, impossible to ravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions, free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

Send or call for a circular, containing all particulars, prices, testimonials, etc. feb12.

WM. SUMNER & CO.

1,200 Kegs No. 1 Railroad Spikes, $\frac{5}{8}$ by 9-16th, Corby, Gossin & Co.'s make for sale very low by
TRABER & AUBERY,
7 Public Landing

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions. Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair, Ohio Mechanics' Institute. June 18, 1855—13

Commencing April 11, 1859.

LITTLE MIAMI

—AND—

COLUMBUS AND XENIA



RAILROAD.

FOUR TRAINS DAILY.

Three Through Express Trains.

FIRST TRAIN—No. 1 Express, at 6 A. M., connects via Columbus and Cleveland; via Columbus, Crestline, and Pittsburg; Detroit via Cleveland and Steamers. This train stops between Cincinnati and Columbus, at Loveland, Deerfield, Morrow, Xenia, Cedarville, South Charleston, London, and West Jefferson.

SECOND TRAIN—No. 2 Express, at 8 A. M., connects via Columbus, Bellair, and Benwood; Wheeling, via Columbus, Steubenville, and Pittsburg; via Columbus, Crestline, and Pittsburg; via Columbus and Cleveland; Detroit, via Cleveland and Steamer; Springfield. This train stops between Cincinnati and Columbus at Plainville, Milford, Loveland, Morrow, Spring Valley, Xenia and London.

THIRD TRAIN—Accommodation, at 4:40 P. M., for Columbus and Springfield.

FOURTH TRAIN—Night Express, at 11:30 P. M.; connects via Columbus, Bellair, and Benwood; Wheeling; via Columbus, Steubenville and Pittsburg; via Columbus, Crestline and Pittsburg; via Columbus and Cleveland. This train stops at Loveland, Morrow, Corwin, Xenia and London. *Sleeping Cars on this Train.*

No. 1 Express through to Cleveland without change.

The Night Express Train, leaving Cincinnati at 11:30 P. M., runs daily, except Saturdays. The other trains run daily, except Sundays.

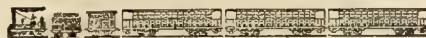
For all information and Through Tickets to Boston, New York, Philadelphia, Baltimore, Washington, Buffalo, Niagara Falls, Dunkirk, Cleveland, Pittsburg, Wheeling, and all Eastern places, please apply at the offices, Walnut Street House, No. 1 Burnet House, south-east corner of Broadway and Front Streets, and at the Eastern Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Superintendent.

Omnibuses call for passengers by leaving directions at the Ticket Office.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE.

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads. Steamers, etc., for and from all points in the

West, South-West and North-West.

Fare to New York and Boston ONE DOLLAR less than via any other route.

TWO TRAINS

Leave Wheeling daily at 8:05 P. M., and 11:30 A. M.

Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.

Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2.

Quick time and sure connections.

Inquire for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

E. F. FULLER,

General Western Agent.

L. M. COLE,

General Ticket Agent.

W. P. SMITH, Master Transportation.

WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Card, Posters, &c. executed in the highest style of the art.

MIDDLETON, STROBRIDGE & CO.,
Jan 8 13 119 Walnut st., Odd Fellows' Building

CHICAGO,
Great Western and North-Western
ROUTE.INDIANAPOLIS & CINCINNATI
SHORT LINE

RAILROAD.

(VIA LAWRENCEBURG.)

Distance 110 Miles and No Change of Cars Between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS LEAVE CINCINNATI daily, (Sundays excepted,) from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6 A. M.—Chicago and Terre Haute Day Express—Through to Terre Haute, Lafayette, and Chicago, with but one change of cars.

SECOND TRAIN, 4:15 P. M.—Accommodation—The 4:15 P. M. train arrives in Indianapolis at 10:10 P. M.

THIRD TRAIN—Chicago and Terre Haute Night Express—8 P. M.—Arrives at Indianapolis at 1 A. M. This train runs through from Cincinnati to Chicago, with but one change of cars.

The above trains make close connections at

Indianapolis, Lafayette and Chicago,

WITH TRAINS FOR

Terre Haute,	Lafayette,
Springfield,	Jacksonville,
Rock Island,	Danville,
Galesburg,	Burlington,
Kenosha,	Milwaukee,
Mattoon,	Pana,
Naples,	Peoria,
Galena,	Dunleith,
Quincy,	Racine,
Prairie du Chien,	Decatur,
Bloomington,	Joliet,
Lasalle,	St. Paul,

And all towns and cities in the North-west.

Connections are also made at Indianapolis with the Peru and Indianapolis Railroad for Kokomo, Peru, Logansport, Fort Wayne, Toledo and Detroit.

Be sure you are in the right Ticket Office before you purchase your ticket, and ask for tickets

Via Lawrenceburg & Indianapolis.

THROUGH TICKETS.

Good until used, may be had at the Company's Offices, north-west corner Broadway and Front Streets, under Spencer House.

A. HAMILTON, Ticket Agent.
No. 1 Burnet House, north-west corner Third and Vine Streets.

WM. M. STARK, Ticket Agent.
Also at the Walnut Street House.

J. S. SHACKELFORD, Ticket Agent.
And at the Depot, where all necessary information can be had.
H. C. LORD, President.
W. H. L. NOBLE, General Ticket Agent.

Commencing May 22, 1859.

OHIO & MISSISSIPPI



RAILROAD.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCENNES, Cairo, and St. Louis, at 9:00 A. M., and 8:30 P. M.

Three Daily Trains for Louisville, at 9:00 A. M., 2:00 P. M., and 8:30 P. M.

One Train for Evansville at 8:30 P. E.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 8:30 P. M.

RETURNING.—FAST LINE—Leaves East St. Louis, (Sundays excepted) at 6:50 A. M., arriving at Cincinnati at 10:10 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 2:40 P. M., arriving at Cincinnati at 6:48 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the offices: Walnut Street House, bet. Sixth and Seventh Streets, No. 1 Burnet House, corner office; north-west corner of Front and Broadway; Spencer House Office; and at the Depot, corner of Front and Mill Streets.

W. H. CLEMENT, General Superintendent.
Omnibuses call for Passengers.

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

SOLE IMPORTERS
PROSSER'S PATENT SURFACE CONDENSERS for high pressure steam, with sea or other bad boiler water, gauges, 3-cutter drills, counter-sinks, tube end cutting bars, expanders, tube scalers, steel wire and whalebone brushes, pall lever wrenches, tubes—plain or enameled, screwed together for Artesian Wells, Hollow Slabs for various purposes. Steel for Rollers.
THOS. PROSSER & SON.
27 Jan. 28 Platt Street, New York.

G. G. LOBDELL. H. S. M'COMBS. D. P. BUSH.

BUSH & LOBDELL,
Wilmington - - - - - Delaware
MANUFACTURERS OF

CHILLED WHEELS

AND
TIRES,
For R. R. Cars & Locomotive Engines,
ARE PREPARED TO

Execute Promptly Orders to any Extent
FOR THEIR
CELEBRATED WHEELS,
EITHER SINGLE OR DOUBLE PLATE,
WITH OR WITHOUT AXLES.

WHEELS FITTED
To Hammered or Rolled Axles.
In the best manner, at the shortest notice, and on the
Most Reasonable Terms.

A Book for Every Business Man!
JUST PUBLISHED

—THE—
POST-OFFICE GUIDE!
For Post-Masters and Business Men.
CONTAINING

A Complete List of Post-Offices in the United States and Territories, arranged by States and Counties; A Complete List of all Distributing Post-Offices; Rates of Foreign and Domestic Letter Postage; Rates of Printed Matter, Transient and Regular; Abstract of the Laws and Regulations of the Post-Office Department, &c., &c.

COMPILED BY E. PENROSE JONES,
Late Assistant Post-Master at Cincinnati.
Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.
U. S. BLANK AGENCY, CINCINNATI POST-OFFICE,
January, 1859.

This work has been carefully compiled and corrected by E. PENROSE JONES, Esq., late Assistant Post-Master of the Cincinnati P. O., from the Records in this Department, and other sources, and contains the most complete list of Post-Offices especially of the Western, North-Western, and South-Western States, yet published.

MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an octavo pamphlet of about 100 pages. The entire matter is kept standing in type, and as the compiler is promptly advised of all New Offices, Changes and Regulations of the Department, the information is corrected up to the last day of publication, an advantage possessed by no other work of the kind.

Observe, That this list is arranged by States and Counties, making it especially valuable to business men. No similar arrangement has been published since 1856. There are 3000 more offices in this than in any book heretofore issued. The Price is one-half that of any work of the kind now published.

Single copies sent by mail (postage prepaid) to any address, upon receiving Twenty-five Cents in Silver or Postage Stamps. Five Copies sent for \$1.00, or Twelve Copies for \$2.00.

Address,
C. S. WILLIAMS,
194 Walnut Street,
Cincinnati, Ohio.
Mar 10. ff.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Booksellers, Country merchants, and others to our extensive stock of Stationery, Theological, Standard, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the leading publishers, and the principal manufacturers of Paper and Stationery, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

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Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, Envelope, Manila and Tea wrap-boards, Envelopes, Gold and Steel Pens, Penholders, Copying Books, Ink and Scales, Sealing Slates, Mucilage, Book rests, Bill envelope and Card cases, Cush and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files: Date Calendars, together with all other articles used in the counting-house.

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To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly paged, including all sizes, from the small memorandum book to the large Super-Royal Ledger, and variety of styles workmanship, order of any device with or without and warranted to in quality of paper, ruling and durability of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

BLANK BOOK MANUFACTURERS,

We are prepared to Print and Bind books of any style and in any quantity, at rates as low as quality of work cut in this where. Our executing these facilities for the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bill Heads, Cards, Circulars, or other descriptions of printing, will find that we do such jobs despatch. Orders respectfully solicited.

Publishers,

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, *Clark's Compendium*, *Dick's Works*, *Rollin's Ancient History*, *Plutarch's Lives*, *Josephus*, *Spectator*, *Chain of Sacred Wonders*, *Familiar Science*, *Webb's Monitor*, *Soden's German*, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

43 MAIN STREET CIN.

MOSELEY'S TUBULAR WROUGHT IRON



ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs, are wholly of Wrought Iron, or mixture of Wood and Iron; Sheetings always Iron.

The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges.

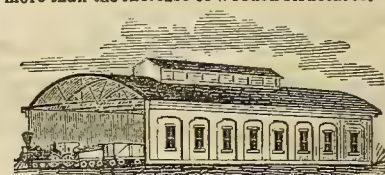
We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

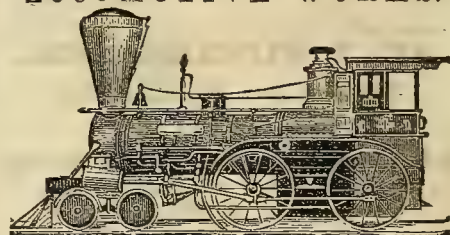
Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O. may 13. MOSELEY & CO.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20 MOORE & RICHARDSON.

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DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, but more extended in Mathematics, Mechanics, Machines, Construction, Agricultural Chemistry and Mining Geology; also in English Literature, Historical Readings, and Modern Languages, accompanied by daily and regulated exercise.

Schools of Architecture, Engineering, Commerce, Medicine, and Law, admit of selecting studies to suit time means, and object of Professional preparation, both before and after graduating.

The twelfth annual term is now open. Charges, \$102 per half-yearly session, payable in advance.

Address the Superintendent, at "Military Institute, Franklin Springs, Ky.," or the undersigned.

P. DUDLEY,
President of the Board

Jan 5. ff.

The Railroad Record.

H. D. MANSFIELD, } Editors.
T. WRIGHTSON, }

CINCINNATI:

Thursday Morning, June 16, 1859.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.

One square, single insertion,.....	\$1 00
“ “ per month,.....	3 00
“ “ six months,.....	12 00
“ “ per annum,.....	20 00
“ column, single insertion,.....	5 00
“ “ per month,.....	10 00
“ “ six months,.....	40 00
“ “ per annum,.....	80 00
“ page, single insertion,.....	15 00
“ “ per month,.....	25 00
“ “ six months,.....	110 00
“ “ per annum,.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

CHICAGO AND NORTH-WESTERN RAILROAD COMPANY.—The Chicago, St. Paul and Fond du Lac Railroad Company, by the sale of their road, etc., under a mortgage conveying all necessary power therefor, has ceased to exist as a Company.

In its stead a new Company has been formed under the name and style of the Chicago and North-Western Railroad Company, and the following officers have been duly appointed by the Board of Directors:

President, Wm. B. Ogden, Chicago; *Vice President*, Perry H. Smith, Appleton, Wis.; *Treasurer*, E. W. Hutchings, New York; *Ass't Treasurer*, Geo. P. Lee, Chicago; *Secretary*, Charles Butler, New York; *Ass't Secretary*, J. B. Redfield, Chicago; *Superintendent*, Geo. L. Dunlap, Chicago; *Ass't Sup't*, T. F. Strong, Fond du Lac, Wis.

This transfer and change of title and possession (for the operating purposes of the Road,) takes effect from the 1st June, inst.

The present condition of the road is as follows, viz:

Road is completed—Chicago to Janesville, Wis.	91 miles.
La Crosse Junction, Wis., to Oshkosh.....	48 “
	139 “

Under contract to Wells & French, of Cleveland, O., and D. D. Campbell, to be completed in four months—the intermediate portion, from Janesville to La Crosse Junction.....

Chicago to Oshkosh.....195 “

CONNECTIONS.

RACINE & MISSISSIPPI R. R.—Beloit, Freeport, and Dunleith.
MILWAUKEE & MISSISSIPPI R. R.—Madison, Prairie du Chien, and all points on Mississippi River.
LA CROSSE & MILWAUKEE R. R.—Portage City, La Crosse and all points on Mississippi River.

It is hoped to have the road completed and run through to Oshkosh and La Crosse, by 1st November next.

Vol. 7.—No. 17.

NATIONAL RESOURCES.

It is an anomaly in the history of the world to see a country, as ours has, in the first few years of its national boyhood, making such rapid strides towards the foremost rank of nations in wealth and resources. Thus far, however, have we ever been an importing nation of goods and wares, but as the density of our population increases, so likewise will the ratio of our manufactures. By pursuing a policy that will nurse the *infant arts* in turning the vast supply of raw material in our midst to the useful things of every day life, the next half or even quarter century will change us from exporters of gold and the raw materials to exporters of every variety of manufactured wares, and importers of the precious metals. Mr. Guthrie, the late Secretary of the Treasury of the United States, in his last Report, gives us many important and interesting facts and details on this subject.

In 1840, the value of our manufactures was returned in the Census at \$483,278,215, and in 1850 they were returned at \$1,055,595,898. At this ratio of increase, our manufactures in 1855, amounted in the aggregate to \$1,391,031,283. It will thus be seen that we have become a great manufacturing people. In the course of fifteen years, the value of the products of American industry nearly trebled. The movement, too, was still onward, and ten years from the present time, millions upon millions will be added to the grand result. At first, says Mr. Guthrie, we manufactured the coarser and more bulky articles required by our population; gradually we have extended our operations to a great variety of articles, and to some requiring much skill in the execution, and now our manufacturers are in possession of the home market, in a great variety of articles. In 1790, our planters raised no cotton for exportation; now it is the great crop of our planting States, and they furnish it as a raw material to the manufacturing States, as well as to foreign nations, and now we manufacture the coarser cotton goods for the consumption of our entire population, and exports near seven millions of dollars annually to foreign countries. Our manufacture of cotton in 1840, was \$46,350,453; in 1850, \$61,869,184; and the same ratio of increase in 1855, would give \$70,964,712. The history of the rise and progress of American manufactures, together with the growth of cotton and other productions, is suggestive of all that is required to extend our cotton manufactures to that of the finer fabrics, and to the enlargement of the home and foreign market, for our cotton and cottons, and, indeed, for all branches of our manufacturing and agricultural productions. Allow the incidental protection of a revenue tariff, and place our manufactures and productions upon the same beneficial footing, that foreign manufacturers and producers enjoy, in our own and foreign countries, by taking off the duty we now im-

pose on the raw material, and give them fair and equal competition for the home and foreign markets, and we may safely leave all the rest to the skill and enterprise of our people.

In relation to iron and steel, we learn that we produced and manufactured in 1840, articles of these materials, to the amount of \$29,990,162, and that we imported iron and steel, and the manufactures of iron and steel, to the amount of \$7,088,739, and exported iron and steel, and the manufactures of iron and steel, to the amount of \$1,104,455; leaving for consumption \$35,893,446; and from the census of 1850, that we produced and manufactured iron and steel, that year, to the amount of \$60,485,653, and that we imported iron and steel, and the manufactures of iron and steel, to the amount of \$17,524,459 and exported iron and steel, and the manufactures of iron and steel, to the amount of \$1,911,320; leaving for the consumption of the year, \$76,098,792. The same ratio of increase, in the production and manufacture of iron and steel from 1850 to 1855, that is found to exist between the years 1840 and 1850, gives the production and manufactures of iron and steel for 1855, at \$78,406,538. To this add \$23,945,274, for the amount of the imports of iron and steel, and manufactures of iron and steel for the year 1855, first deducting the export of those articles, and there is iron and steel, and the manufactures of iron and steel, to the amount of \$98,598,340, for the consumption of the year. The estimate of \$78,406,538 for the year 1856 is, no doubt, some ten or fifteen millions less than the production.

Nay, it is affirmed that we have in the United States more iron ore, and more coal, with the usual fluxes, in convenient connection and of cheaper access, than all the other civilized nations of the world. We have, moreover, the necessary capital, skill, and labor to produce all the iron and steel, and manufactures of iron and steel, that may be required for our consumption for centuries to come, and it is estimated by a reasonable process, that we should become exporters of these articles to a very considerable extent, before the year 1870. A reference to the table of production, taken from the census of 1840, will show that our agricultural and manufacturing production in that year, amounted to \$1,006,133,599; and a reference to the like table of production, taken from the census of 1850, will show the agricultural and manufacturing production for that year, to have been \$2,012,520,539, and the ratio of increase. A like ratio of increase, for the five succeeding years, gives \$2,602,363,924 as the value for the year 1855. Suppose \$1,000,000,000 to be consumed at the places of production, and there is left \$1,602,363,924 of production, as the basis of our foreign and internal trade, and the source from which we derive profitable employment, for our registered and licensed tonnage and our railroads. Take fifteen per

cent. of this for our foreign trade, which is about equal to exports, and there is left \$1,352,009,336 for our internal trade, constituting the commercial ligament, that binds us together as one nation and one people.

In relation to agriculture, we have the following results, according to the Census of 1850:

Total acres under tillage.....	113,032,614	
Indian corn, bush.....	592,071,104	\$296,035,552
Hay, tons.....	13,819,242	138,382,420
Wheat, bush.....	100,485,844	90,437,260
Oats, bush.....	146,384,179	51,304,463
Cotton, lbs.....	9,831,720	78,265,376
Rye, bush.....	14,188,813	9,932,169
Peas and beans, bush.....	9,219,901	6,914,935
Irish potatoes, do.....	65,797,895	26,319,158
Sweet potatoes, do.....	38,268,148	19,134,074
Buckwheat, do.....	8,956,912	5,374,147
Tobacco, lbs.....	199,752,655	11,985,159
Sugar, lbs.....	237,133,000	9,485,320
Barley, bush.....	5,167,015	3,875,461
Rice, lbs.....	215,313,497	4,306,270
Hemp, tons.....	34,871	6,184,520
Flax, lbs.....	7,809,676	424,744
Orchards.....		7,723,185
Gardens.....		5,200,000
Vineyards, galls.....	231,249	443,498

The reader, from this hasty outline, may form something like an adequate idea of the immense resources of the Republic. We are within the first century of our national existence.

A MUCH NEEDED MIDLAND R. R.

It is impossible to over-estimate the importance of the trade that would result to Cincinnati, and the surrounding manufacturing and commercial interest, dependent upon her as a disbursing point for their wares and merchandise, that would be opened up by a connecting link, between the northern and southern system of railroads. We have long felt the want, and as often urged upon our merchants and manufacturers, the importance of at once completing the this central channel, through which the products of the South and the wares of the North could be exchanged. This too is a trade that geographically belongs to Cincinnati, she can control it, by putting forth the necessary efforts now, otherwise different channels will be opened, and the opportunity will be lost, and lost forever.

Ready response will be found in the hearts, and from the pockets of the people along the line. We commend to the perusal of our readers the following appeal from an influential citizen of Scott County, Tennessee, as published in the *True American*, and sent to us for publication.

"I never think of the country between Knoxville, Tennessee, and Lexington, Kentucky, without astonishment that there is as yet no *midland* connecting link between the railroads of the North and the railroads of the South. Railroads have now grown to the days of their strength. They have stood the test of thirty years. They at first, like all other great improvements, encountered difficulties; but their utility has now been long established; and their worth is progressively increasing—for of late years improvements of great value have been effected not only in the construction of roads and rails and cars and engines, but in

the whole economy of working them; and America, nobly rising and marching in her might, is now decidedly ahead of all the countries of the world as to the extent and utility of her railroads. She has in operation over twenty-eight thousand miles of railroad; in which more than a thousand millions of dollars have been invested; but ever even to this day she has no *midland* rail communication between her Northern and Southern States! She has allowed a narrow strip of land to stretch its ugly length for more than five hundred miles along the boundary of two of her *oldest* States, across the very center of the country between the North and the South: and she has, as yet, attempted no railway cutting across it! Should the midland population of each side of land attempt to traffic together, or to carry on any description of commerce or intercourse, they must make a circuit of more than a thousand miles, around its Atlantic end, or around its Mississippi end: Whereas, if there had been a *midland* railroad, across the small of its back, the distance would have been less than two hundred miles. A line from the lowest point of the Northern railroads at Nicholasville, Kentucky, through the Elk Pass, to one of the *chief* stations of the Southern railroads at Knoxville, would be less than one hundred and fifty miles! There has been much *said* and *written* about opening that line, or filling that blank so as to complete that link of connection between the two great sections of the Union; but very little has been *done* for the past two years.—There has been enough of rest, and more than enough of debilitating lethargy. It is time to awake out of sleep, and to gird up the loins to commence a new with redoubled energy and earnestness. The completion of that connecting link would be a new bond of Union, of undying strength, around the very *center* of the country. It would be a large artery for the transfusion of fresh healthy life-blood from the heart to the extremities. It would be a re-invigoration of the whole body, for it would prove a grand trunk-nerve for the transmission of full currents of strength and activity from one end to the other. It would be a kind of electric medium for the virtues of the North to flow down to the South, and for the graces of the South to flow up to the North, and both sides would be great gainers by such an admixture. It would convey produce from the South that would be of important value to the North, and would convey produce from the North that would be most useful to the South. It would be a central communication for vast varieties of traffic between the great midland markets of the North and all the ports and cities of the South, would open a large central district of exhaustless *mineral* wealth, and prove a feeder of rich interest to the railroads which it would connect. It would bring into culture extensive midland districts of the healthiest and loveliest character, which have hitherto been almost entirely overlooked and neglected.

"It would be a midland communication of vast commercial and political advantages, and would be of the highest and purest social and religious gain to the whole country; but as yet there has been no righteous awaking to a comprehensive sense of its importance; and consequently no adequate effort has been made to open such a communication. The *North* imagines that the greatest gain from it would accrue to the South, and it, therefore, turns aside unconcerned. The *South* supposes that the heaviest portion of the gain would go to the North, and it looks away with indifference. The *center* calculates that the two ends would engross the lions share of the gain, and it heartlessly passes its days in idleness. Thus the parties more directly interested coldly keep aloof from each other under the blighting influence of misgivings, and of jaundiced misapprehensions and miscalculations. They have no full, friendly, open consultations for mutual inquiry and explanation and counsel. They forget the first principles of the laws of combination and coöperation and mutuality. If they would have but one or two meetings for deliberation and discussion, they would soon find it clearly demonstrated that the completion of such a direct central link of communication between the North and the South would be a comfort, and a credit and a gain to them *all*, a gain of incalculable worth—a gain that would acquire *growing* weight and strength and velocity and volume as rolling onward. And no keenness of foresight, or powers of calculation can now determine to whom the largest share of those ever growing gains would accrue. They would *all* reap a rich and joyful harvest.

"The Legislatures of Kentucky and Tennessee ought to devote more time and thought to the subject; and indeed the Federal government might—on consideration of its general utility, find it more deserving of countenance, than a more distant enterprise. Its various bearings ought to be more fully examined and discussed. And if public meetings, attended by gentlemen of information and experience, and influence, were held at the chief points along the line from the upper corners of Ohio down to the ports of the South, a light would be thrown around the project, and a power would be brought to bear in its favor that would at once guaranty its speedy accomplishment—for it would really be but a *light* and *easy* work for the *contrived* energies of the parties that would be most largely benefited by its completion."

☞ The Chicago, Iowa and Nebraska Railroad, extending from Clinton, on the Mississippi, to Cedar Rapids, eighty-one miles, is to be formally opened for business by a grand celebration at Cedar Rapids next week.

☞ A small piece of paper or linen, moistened with turpentine, and put into wardrobes or drawers, for a single day, or three times a year, is a sufficient preservation against moths.

PACIFIC RAILROAD.

Speech of the Hon. Jefferson Davis, of Mississippi, on the Pacific Railroad Bill, delivered in the Senate of the United States, January, 1859.

(CONCLUDED.)

Passing on the *thirty-fifth parallel route*, where it has been said we have the best soil, and the greatest abundance of timber and water, and, therefore, the best line for a road, I will first notice the soil. I read from the Office Examinations of the field work of the railroad explorations:

"Grama grass being found on the north bank of the Canadian, in longitude 96 deg., and extending westward in greater or less abundance to the Sierra Nevada, indicate, that the change from fertility to barrenness begins in that latitude, at least north of the Canadian. Cactaceæ also make their appearance with grama grass. South of this, however, the geological formation is that of a good soil, to about longitude 98½ deg. At this point, the change to uncultivable land is complete, except in the river bottoms, which are more or less fertile, but not the great body of the land. Not far south of the route good soil extends westward to the termination of the Wichita mountains. Some portions of the upper valley of the Canadian, the upper valley of the Pecos, the valleys of the Rio Grande, Zuni, Colorado Chiquito, San Francisco, Colorado of the West and its tributaries, possess a fertile soil, requiring generally irrigation to make it productive. That portion of the southwest corner of the Great Basin traversed by this route, and over which the explorations of Lieutenant Williamson extended, is well constituted for fertility, its barrenness resulting from the absence of rain. Generally, the uncultivable plains have an abundance of nutritious grass, though there are extensive tracts where little or none is found—the two greatest being from the Antelope Hills to Tecumcari creek on the Canadian, two hundred and fifty or two hundred and sixty miles, and from the lower part of Santa Maria river, to the Mohave river, two hundred miles."

Upon this route, I think the interior is better supplied with such timber as will serve to construct a railroad, than upon any other route, except that of the forty-ninth parallel. There are some portions of the line where the timber will have to be carried a considerable distance. This is true, however, of all the routes; and in the comparison, therefore, it is hardly necessary to speak of it. On this route, there is a smaller portion of the distance, I think, where fuel can not be got, than in any other; but

"From the Aztec Pass to the Sierra Nevada, four hundred and twenty miles, no fuel for railroad purposes will be found, and that, for working parties, will be scanty in some places. From the point of leaving the Colorado to the Mohave river, one hundred and fifteen miles, no fuel is to be had."

And, it might have been added, *no water*. That portion of the difficulty on this route has been constantly overlooked; no mention has been made of it. Gentlemen have spoken of it as though they had passed all difficulty and reached a point where all was smooth. They seem to be clinging to the old error, that the Mohave river is a tributary to the Colorado, and that when they reach the Colorado, they have passed into the Mohave valley, an error long since corrected by these explorations. It is shown that there is a high ridge, rising to four or five thousand feet above the sea, between the termination of the Mohave river and the Colorado, and that the Mohave river sinks in a kind of pool never to rise again. The party of exploration, when they left the Colorado, had to divide into three parts to get water when crossing this ridge to the Mohave river. As to the general supply of water on the thirty-fifth parallel route, it is stated in the official review that:

"The exact distances over which water is not found at certain seasons, or permanently, are not stated. It does appear, however, that a resort to unusual means will be necessary east of 100 deg. longitude. Between that and the Pacific there are spaces destitute of it, where, from the unknown character of the geological structure, there is no doubt that sufficient supplies can be obtained either by deep wells, artesian wells, or reservoirs."

"These larger supplies of timber and water, west of the Rio Grande, are attained at the expense of great elevation and somewhat rugged ground."

I will now proceed to the consideration of the only remaining line, the *route of the thirty-second parallel*. I hope I am not expected to make it quite smooth, or find water at convenient distances, cultivable land, and timber continuously along the route. I know of no such route across our Territories. I wish I did. If there were a route where it was thus made easy to build a railroad, we might feel a more happy security for the future. It would bring in its train not only the construction of such a work, but that continuous population which is needful to bind the two parts of the country together. Knowing no such line, I believe it is a herculean task to construct the road, attempt it where you will. Go on what parallel of latitude you may, all you can do is to take the least of most serious obstacles. I reached the conclusion that the difficulties were least on the thirty-second parallel; not that they were light. This conclusion was based upon the information possessed at that time. Subsequent explorations have materially improved the location upon this route, as I shall proceed to show, first describing the section from the Rio Grande to the Pimas Villages.

The Office Examination says:

"After ascending from the bottom lands of the Rio Grande, in traversing the region examined by Lieutenant Parke between these two rivers, from Dona Ana to the Pimas villages, one appears to be traveling on a great plain, interrupted irregularly and confusedly by bare, rugged, abrupt, isolated mountain masses, or short ranges, seemingly, though not in reality, without system. Winding around these isolated or lost mountains, or using a few passes through them, a railroad may be constructed with easy grade. Except through the mountain passes, the surface is so smooth as to require but little preparation to receive the superstructure of a railroad; and even in the two most difficult of the passes, (where, in one case, deep cutting, or a tunnel at the summit, near the surface, in rock, with heavy side cuttings and high embankments for short distances, and in the other a short cut of sixty feet—probably through rock—are proposed by Lieutenant Parke, to attain grades of forty-six feet and ninety feet per mile, or less, by increasing distance,) the natural slope of the ground may be used for a railroad for temporary purposes, and until the road itself can reduce the cost of materials and supplies to the lowest rates."

The re-survey by Lieutenant Parke shows that these two most difficult passes may be avoided.

In relation to the supply of water upon this part of the route, the report of the Secretary says:

"The great difficulty experienced in crossing this district is in the long distances over which no water is found at certain seasons. The survey by Lieutenant Parke was made during the driest season of the year, and, irrespective of the springs found at intermediate points, the whole distance between the two rivers, Rio Grande and Gila, may be divided into five spaces, varying from eighty to fifty-three miles in length, at the termination of which, large permanent supplies of water are found at the most unfavorable season of the year.

These spaces and points are—

From the Rio Grande to the Rio Mimbres.....	71 Miles.
From the Rio Mimbres to the stream of the Valle de Sauz.....	72 "
From the Valle de Sauz to the San Pedro.....	80 "
From the San Pedro to Tucson.....	53 "
From the Tucson to the Gila.....	79 "

Intermediate between these streams are permanent springs; and the new survey has improved the location in this respect. In his last report Lieutenant Parke states:

"The supply of water upon the plateau is limited. Along and near the proposed line it is found at the following localities, and from these the working parties can be supplied: at Neide's spring, at the southwest corner of the basaltic hills, east of Cooke's spring; Rio Mimbres; Agua Fria; Ojo de la Vacca; Ojo de Inez; Valle del Sauz; in the Puerto del Dado; Croton springs at the Playa de los Pimas; Castro spring, near the Railroad Pass under Mount Graham; Pheasant creek; Antelope and Dove springs, at the base of the Calitro mountains; and at Bear springs at the head of the Aravaypa. The distances, in direct lines, from one of these localities to another, are as follows:

From the Rio Grande to Neide's spring.....	40 Miles.
From Neide's spring to Cooke's spring.....	12 "
From Cooke's spring to Rio Mimbres.....	21 "
From Rio Mimbres to Agua Fria.....	15 "
From Agua Fria to Ojo de la Vacca.....	6 "
From Ojo de la Vacca to Ojo de Inez.....	12 "
From Ojo de Inez to Valle del Sauz.....	40 "

From Valle del Sauz to Puerto del Dado.....	23 miles
From Puerto del Dado to Castro spring.....	30 "
From Puerto del Dado to Croton springs.....	30 "
From Castro spring to Croton springs.....	18 "
From Croton springs to Pheasant creek.....	12 "
From Pheasant creek to Antelope spring.....	2 "
From Antelope Spring to Dove spring.....	3 "
From Dove spring to Bear spring.....	16 "

"On the San Pedro route water is abundant and convenient, at Chameleon spring and Prospect creek, and in the entire valley of the Rio San Pedro. Besides these permanent supplies, water is found, after the rains, on the *playas* and in depressions in the drains."

It has been argued, and, I think, successfully, that if the road were built, it might be worked from one supply of water to another; but that has never satisfied my mind in relation to the difficulty which presents itself in building the road. Without tanks or wells, I do not see how the road is to be built, how working parties are to be sustained, with the distances which are found upon every route which has been surveyed.

The facilities for making such artificial reservoirs upon this part of the thirty-second parallel route are thus favorably described by Lieutenant Parke:

"For the working parties in the construction of the road, during the dry season, water can be obtained from the several above mentioned permanent sources of supply, but this will involve, of necessity, much hauling, the maximum distance being twenty-three miles. But I am clearly of the opinion that water can be obtained at other points along and near the line of construction by sinking common wells. These *playa* formations are particularly favorable. Being basin-shaped, they receive and retain the drainage from the surrounding country, giving us natural reservoirs, which require only to be tapped to give a constant and plentiful supply."

I will next proceed to describe the section west of the Pimas villages. The Office Examination states:

"We have now reached the Gila, seven miles above the Pimas villages, the elevation above the sea being one thousand three hundred and sixty-five feet. From this point to its junction with the Colorado, the valley of the river is highly favorable to the construction of a railroad. There will be no necessity for embankments against freshets, but trifling occasional cutting and filling; and in those instances where the hills close in upon the river, there is ample space for the road without heavy cutting. The elevation at the mouth of the river being one hundred and eight feet, and the distance between the two points two hundred and twenty-three miles, we have a general slope of five and six-tenths feet per mile, which, from the favorable character of the ground, may be assumed as the grade of the road."

"Water and fuel for working parties are sufficient, though no grass. Logs may be driven down the Gila from the Mogogyan mountains, at its source, from the Pinal Lleno, and down the San Francisco and Salinas rivers, from the pine forests on the former, and the mountains at the source of the latter."

"But it may be found more economical to receive all the supplies of lumber needed from the western portion of the road, either from the San Bernardino mountains and Pass, or from the harbors of San Pedro or Diego, or, should it be found desirable to establish one, from the depot near the mouth of the Gila."

Senators will perceive that I am here explaining the basis on which I formed the opinion which governs my vote in this case. I have no controversy with any body. I do not expect to satisfy gentlemen that their routes are not as good as they wish them; but I am dealing with the facts as they are contained in the reports, to justify me in the opinion which I have officially expressed, and on which I am now acting in my proposition to grant a given sum to make a railroad. I have not encountered all this labor in a mere spirit of controversy.

"The most favorable point for crossing the Colorado is at the junction of the Gila, where the river is narrowest, six hundred and fifty feet wide, and has bluffs on both banks."

"The direction that the road should take across the desert intervening between it and the foot of the Coast range, depends, in part, upon the position of the pass by which it crosses this mountain chain. There are two passes known and explored. Warner's, the more southerly of the two, will require five miles of excavation in granite and mica slate for the full width of the road, the grades varying from one hundred and thirty to one hundred and ninety feet per mile."

"The distances from the mouth of the Gila, over the desert, to the entrance of this pass, is eighty miles; thence to San Diego is one hundred and fifty miles. The San Gorgo-

nio or San Bernardino Pass, on the contrary, is remarkably favorable. It is an open valley, from two to five miles wide, the surface, smooth and unbroken, affording in its form and inclination every facility and no obstruction to the building of a railroad."

This plain, eighty miles in width, has been treated as a desert *jornado*, although there are springs and wells upon it, and the water of the Colorado sometimes overflowing or rising in the middle of the plain forms what is called New river. The plain is certainly deficient in water; but it is evidently a delta formation, and not a desert in the sense of being unproductive because of its constituent elements. It is all of alluvial formation, clearly once belonging to the Colorado, and habitually overflowed by it; but the deposit on the banks of that stream, having enough moisture and tenacity to catch the sand driven upon it by the prevailing winds, at last became a natural levee or barrier sufficient to restrain the floods; and long drought rendered the alluvial plain west of the river entirely sterile. Thus, I am informed, it is now along the Rio Grande. When the cultivation of a field is abandoned, left for but a few years without irrigation, sterility ensues, but it can be restored to fertility by again supplying it with moisture.

The supply of timber upon this whole route is deficient. The points where it may be obtained, are thus stated in the Office Examinations:

"Let us assume the most unfavorable case for supplies of ties and lumber over that portion of the route between the eastern limit of the Llano estacado and the summit of the San Geronio Pass, 1,052 miles—that is, that they must be brought from either end of the road, say 300 miles from the eastern limit of the Llano Estacado, and from the port of San Pedro on the Pacific. 100 miles from the summit of the San Geronio Pass, making the points of supply 1,400 miles apart; the greatest distance to which they must be transported from each end is, therefore, 700 miles by the road, the point of junction of supplies from the east and west being about 110 miles west of the Rio Grande. Lumber can, undoubtedly, be procured in the Red river district for \$30 per 1,000 feet. The additional cost of transportation to the Llano, 300 miles by the railroad, at three cents per ton per mile, (double the usual cost on eastern railroads,) is \$13½, and its cost there 43½ per 1,000 feet; the cost per 1,000 feet for 450 miles additional transportation is \$20, and hence the cost per 1,000 feet at this extreme point will be \$63½. The mean cost over these 400 or 450 miles from the eastern limit of the Llano Estacado will be \$52½ per 1,000 feet. From Fulton to the Llano it is unnecessary to estimate its cost.

"Lumber may be delivered at Jan Pedro or San Diego from Oregon for \$30 per 1,000 feet. Abundance of it can be got out from the San Bernardino and other mountains near the line of the road at that cost, and it may be assumed, therefore, to be supplied at San Pedro or San Diego at that price, and at a mean cost over the road (the road supplying itself, as it must do, sections of 40 or 30 miles being built at a time,) of \$46 per 1,000 feet.

"The worst case having been discussed, it remains to be said, that good ties and lumber can be obtained from the Guadalupe and Hueco mountains, from the head waters of the Rio Mimbres, from the Pinal Llano, Salinas river, and head waters of the San Francisco, and from the San Bernardino mountains of the Sierra Nevada or Coast range, which sources of supply may be found to materially obviate the necessity of transporting lumber from the two ends of the road."

In fine, it may be said that the route of the 32d parallel from the Mississippi river to the Pacific ocean, is the shortest of those explored, its length being from one to four hundred less than the shortest of the other routes; it is likewise the shortest route to San Francisco, being one hundred miles shorter than any other. The vast uncultivable belt through which all the routes must pass, is crossed by the route of the thirty-second parallel where the width is least, its length through this region being two hundred miles shorter than upon any other line.

The mountain region on this route has the least elevation, and the table lands preponderate to a greater degree than on the other routes.

It is the most economical route; the estimated cost to the Pacific being from eighteen to twenty million dollars less than that of any other, and to San Francisco \$10,000,000 less;

the cheapness of construction being due to the great extent of plains and table lands where the road-bed preparation required is slight.

The mountain passes are open, and their natural slopes admit of temporary use without costly preparation. The winters are so mild that no difficulties, impediments, or dangers from snow and ice are to be apprehended, and this admits of the use of steep grades, and greatly facilitates construction.

On all the routes, unusual means must be resorted to for supplies of water at the distances common on railroads. The intervals between the large permanent supplies on the route of the thirty-second parallel, are not too great for the working of a railroad, but additional supplies, at shorter distances, may be collected by tanks or wells.

In the uncultivable belt that separates the Mississippi valley from the Pacific slope, occasional areas of arable soil are to be found. The route of the thirty-second parallel is neither less favorably situated in this respect, nor in mineral wealth, than those in other latitudes, nor is the supply of building materials and timber materially less on this route than on the others, excepting an interior portion of the route near the forty-ninth parallel.

In confirmation of the opinion expressed in the Secretary's report upon the comparative advantages of the thirty-fifth and thirty-second parallel routes, I wish to refer to the testimony of a civil engineer who has traveled over both and looked at them with a view to the construction of a railroad—Mr. Albert H. Campbell. He was first connected with Capt. Whipple's party for exploring the route near the thirty-fifth parallel; subsequently with that of Lieutenant Parke when re-examining the route near the thirty-second parallel. I intend to read from a letter which I find addressed by him to the Hon. Guy M. Bryan, of Texas, in relation to the Pacific Railroad, published in 1858. On the first page he sets forth his total indifference as to which of the two routes may be selected, and the absence of any pecuniary motive to influence him in one way or the other. He says:

"I have no pecuniary or landed interest in the El Paso route, and consequently have no motive for my preference, except an honest conviction, derived from personal observation, that it is, emphatically, the most practicable, cheapest, and shortest route between the Mississippi river and the Pacific ocean; and the country through which it passes, as a whole, will compare favorably with any other route in agricultural and pastoral resources, and in mineral wealth, and that it is the only route that can be successfully worked during the entire year."

"It is practicable to construct a railroad along the Albuquerque route, as reported by Captain Whipple; but I maintain, and am willing to leave the decision of the ablest impartial railroad engineer in the country, that it can not be done without an immense outlay of treasure in preparing a road-bed, and exceeding, by at least twenty-five per cent., the cost of constructing a road of equal length over the thirty-second parallel."

Of the climate, he says:

"In regard to the climate of winter on the Albuquerque route, I am satisfied that it will be found too cold to work a railroad successfully for at least three, if not four, months of the year. The recorded experience of five winters at Fort Defiance, only twenty miles in latitude north of Campbell's Pass, and about the same elevation (as I observed when I went to that post in November, 1853, through Campbell's Pass, though the Army Meteorological Register, page 641, puts it down (or rather up) to '7,200(?) feet' above the level of the sea,) must be taken as conclusive of the fact of it being at times extremely cold.

"At Albuquerque, according to the meteorological report of the medical department of the United States Army, the maximum and minimum temperatures, respectively, were, for the winter months of 1849 and 1850: in December, 53 deg., 5 deg.; January, 49, 12 below zero; February, 57, 17. For 1850 and 1851: in December, 52, 5 below zero; January, 57, 8; February, 59, 7. For 1852 and 1853: in December, 65, 21; January, 65, 19; February, 66, 13. For 1853 and 1854: in December, 66, 20; January, 63, 5; February, 67, 15; and in December, 1854, 58, 19.

"At Fort Defiance, about twenty miles north of Campbell's Pass in latitude, and from three to five hundred feet higher, the maximum and minimum temperatures, respectively, were: For the month of December, 1851, 62, deg., 4 deg.; eighteen inches snow. For 1852 and 1853: in December, 50, 2; January, 53, 7; February, 66, 6. For 1853

and 1854: in December, 57, 6; January, 49, 20 below zero; February, 54, 2. For 1854 and 1855: December, 65, 10; January, 59, 17 below zero; February, 61, 13. For 1855 and 1856: December, 56, 23 below zero; January, 54, 8 below zero; February, 51, 3 below zero."

A great error has been committed in supposing that because the thirty-fifth parallel route is in a southern latitude it must be in a warm country. Temperature depends as much upon elevation as upon latitude; and fertility results, not from the constituent elements of the soil alone, but from the meteorological conditions of the atmosphere also. Here is an elevation of seven thousand feet above the sea, and a country of extreme aridity. The air from the ocean deposits its moisture it possessed in passing over the mountain ranges, before it reaches this plain. Over it broods a forbidding sterility, and across it the winter winds sweep with a degree of cold scarcely less intense than that found in any portion of our country. At the close of this table, the writer says:

"The table above will give a fair idea of the climate of the country. The winter of 1855-56 was more severe than any one known for many years. The wintry weather commenced on the 1st of November, 1855, and has continued up to the present time, (March 14, 1856.) The Rio Grande, at Albuquerque, was frozen over, and with ice sufficiently strong to bear a horse and carriage. Those Indians who live habitually to the north of Fort Defiance, were obliged to abandon that portion of the country and move south, with their flocks and herds, in quest of grazing, on account of the depth of snow, which, in the mountains, at whose base the fort is situated, was over two feet in depth, in March, 1856." (Correspondence, J. Leatherman, assistant surgeon United States Army; Smithsonian Report, 1855, page 287.)

Speaking of the immense exposure encountered on this elevated plain in winter, Mr. Campbell says:

"The imagination can readily picture the terrible calamity which would inevitably befall a train load of passengers en route for the Pacific, if an accident of a similar kind should stop their progress mid-way upon one of those desolate artemisia districts between the Ojo de Gallo and the Little Colorado, and between the valley of the Big Sandy Fork and the sink of the Mohave, where no human habitation can ever exist between the permanent water stations."

He treats of the supply of water in the same manner as the authors of the official reports. He notices the fact that Captain Marcy, having traveled over the thirty-fifth, and then over the thirty-second parallel route, testified in favor of the latter as an emigrant route. Citing the opinion of Major Emery as to the route on the thirty-second parallel, he says:

"In an allusion to the subject of a railroad, (on page 51, first volume of Mexican Boundary Report,) he [Major Emery] emphatically declares, of the advantage gained by the last, or Gadsden treaty, that it 'has secured what the surveys made under the orders of the War Department demonstrate to be the most feasible, if not the only practicable, route for a railway to the Pacific.'"

The comparison instituted in the office when the field work of the various explorations was reported, was to fulfill the requirements of Congress, to find the most practicable and economical route for a railroad from the Mississippi river to the Pacific ocean. I am not engaged now in the investigation of that exact question, the problem being merely that of crossing the Territories; but as the practicability of effecting a connection between the Mississippi and Pacific may control in any action of Congress, a table has been prepared, which presents, in a condensed form, the distances, and the comparative cost of each route from the Mississippi river to the Pacific ocean. Whether this estimated cost be too high or too low, it is not, for that purpose, needful to inquire. The object was to approach, as nearly as possible, to accuracy of comparison, not to give an absolute statement of the cost. This is all that has ever been claimed for the office estimates of cost; and this is the reason why the estimates of chiefs of parties have been modified so as to bring them to the same comparative scale. I submit the table to the Senate:

Table showing the lengths, comparative costs, &c., of the several routes explored for a railroad from the Mississippi to the Pacific.

ROUTES.	Distance by proposed railroad route.		Sum of ascents and descents.	Comparative cost of different routes.	Number of miles of route through arable land.	Number of miles of route through land generally uncultivable, arable soil being found in small areas.	Altitude above the sea of the highest point on the route.
	Miles.	Feet.					Feet.
Route near forty-seventh and forty-ninth parallels, from St. Paul to Seattle.....	1,955	18,654	\$135,871,000	535	1,490	6,044	
Route near forty-seventh and forty-ninth parallels, from St. Paul to Vancouver.....	1,800	17,645	125,781,000	374	1,490	6,044	
Route near forty-first and forty-second parallels, from Rock Island, via South Pass, to Benicia.....	2,290	29,120*	122,770,000	899	1,400	8,373	
Route near thirty-eighth and thirty-ninth parallels, from St. Louis, via Coo che-to-pa and Tah-ee-chay-pah Passes, to San Francisco.....	2,325	49,985†	Impracticable.	865	1,460	10,032	
Route near thirty-eighth and thirty-ninth parallels, from St. Louis, via Coo che-to-pa and Madelin Passes, to Benicia.....	2,535	56,514†	Impracticable.	915	1,620	10,032	
Route near thirty-fifth parallel, from Memphis to San Francisco.....	2,366	48,521‡	113,000,000	916	1,450	7,550	
Route near thirty-fifth parallel, from Memphis to San Pedro.....	2,090	48,862‡	99,000,000	690	1,400	7,550	
Route near thirty-second parallel, from Gaines' Landing to San Francisco by coast route.....	2,174	38,200§	94,000,000	984	1,190	5,717	
Route near thirty-second parallel, from Gaines' Landing to San Pedro.....	1,748	30,181§	72,000,000	558	1,190	5,717	
Route near thirty-second parallel, from Gaines' Landing to San Diego.....	1,683	33,454§	72,000,000	524	1,159	5,717	

* The ascents and descents between Rock Island and Council Bluffs are not known, and therefore not included in this sum.

† The ascents and descents between St. Louis and Westport are not known, and therefore not included in this sum.

‡ The ascents and descents between Memphis and Fort Smith are not known, and therefore not included in this sum.

§ The ascents and descents between Gaines' Landing and Fulton are not known, and therefore not included in this sum.

In volume seven of the railroad reports, a table will be found with which this very generally corresponds, the difference being that some of the surveys having commenced at interior points, one, for instance, at Council Bluffs, and another at Fort Smith, the estimates of the reports are made from those points. Here they have been extended to the Mississippi river. The table in volume seven is also here modified by the supposition that the reported practicability of the Coeur d'Alene Pass is correct, and thus the total sum estimated for the route near to the forty-ninth parallel, has been reduced. No additions have been made for those difficulties which, in addressing the Senate, I have stated had come to my knowledge since the preparation of my report, because information not derived from instrumental survey, is not accepted as the basis of estimate.

I have only to add, that looking to the grant of land and of money with which Texas has endowed her railroad company, and to the interest which would be brought to bear for the extension of the Texas route to the Rio Grande, by a company formed to build a road from the Rio Grande to the Colorado, I believe the sum of money and the grant of land contained in my substitute, although the smallest proposed by any one, will secure the construction of the road across that intermediate territory, will insure the extension of the road of Texas to the Rio Grande, and that having reached the Colorado, California will charter a company to extend it to San Diego, to San Pedro, or to San Francisco. Most probably a company, if incorporated to build a railroad from Fort Yuma to San Francisco, would first connect with the Ocean at San Pedro, and thus command a more prompt return for their investment in the road than if they awaited its final completion to San Francisco.

I have endeavored, during the progress of

this debate, to ascertain how much of the land in the valley of the Santa Clara and the Salinas might inure to the benefit of a company undertaking to build a road. It is all known to be of the highest fertility, and blessed with a climate not inferior to any within the limits of the United States. If it is possible for the company to obtain near to that line even one-half of the amount of land proposed to be granted, I rely upon the accuracy of Lieutenant Parke's estimates to establish the fact that the road might be built there for the land grant alone. Whenever California shall charter a company to build this road within her own limits, and that company shall ask Congress for a grant of land to construct it, I can not doubt that the interest of the United States will warrant Congress in making such a grant. Thus is reached the conclusion that the Texas road will be drawn on to made a junction with the road built in the Territory, and that the latter, when built to the Colorado, will certainly be extended to the Pacific. The eastern terminus of the Texas road will be available to all the roads which ramify throughout the United States, and be connected, in a very short time, with every important point from St. Paul to Galveston.

If the facts which have been thus imperfectly grouped and presented to the Senate, sustain the conclusion that this result is to be attained by so small a sum of money, it may reasonably be claimed that all who desire the construction of a road across the territory, with complete connections throughout the States, are bound to sustain the proposition which I have submitted.

My position is, that the completion of this great work is necessary to the due execution of the functions of the General Government, that it will not be achieved by private capital alone, therefore that we should strike off every shackle which impedes its execution; should

abandon the right to collect duty on the iron employed; give the whole limit of the United States from which to select a route; extend every aid we can constitutionally afford, to insure the construction of the road somewhere, be it where it may, so that it is on the soil of the United States. If by haggling over petty sectional controversies, if by sticking in the bark and destroying the vital energy of the Constitution, politicians shall defeat the efforts which have been made from session to session, shall prostrate the last hope for this road across the continent, and thus unprepared should we become involved in a war with the great maritime powers of Europe, they may, when it is too late to avert the disasters which have been so often foretold, have cause to pray for the mountains to fall upon and cover them from public indignation; to them may attach the blame, on us all may press the shame and the sorrow of having lost to the country a territory worth innumerable treasure, of having forfeited that, the value of which can not be measured by money—the prestige of stability, progress and invincibility; and the right to inscribe on our notional shield EQUAL TO THE PROTECTION OF A CONTINENT WIDE REPUBLIC.

MONTHLY MEETING OF THE DIRECTORS OF THE BALTIMORE & OHIO RAILROAD.

Important Manifesto from the President—Sanctioned by the Board. The ability of the Baltimore and Ohio to compete with the New York Roads Demonstrated.

At the regular meeting of the Board on Tuesday, the following comparative statement of the earnings of this great Road for May was read:

REVENUE—MAY.

Main Stem.

Passengers.	Tonnage.	Total.
1859.. \$53,367 51	\$288,962 61	\$341,630 12
1858.. 54,997 71	274,041 06	329,938 77
\$1,630 00 Dec.		\$13,321 55 Inc.
		\$11,691 35 Inc.

Washington Branch.

1859.. \$25,654 91	\$9,106 03	\$34,760 94
1858.. 31,888 71	10,623 80	42,511 98
\$6,233 80 Dec.		\$1,517 24 Dec.
		\$7,751 04 Dec.

Northwestern Virginia Road.

1859... \$3,184 85	\$18,383 62	\$11,568 47
1858... 2,489 54	22,639 78	25,319 32
\$695 31 Inc.		\$4,346 16 Dec.
Total for 1859.....		\$397,959 53
Total for 1858.....		397,770 07

Increase..... \$189 46

MANIFEST OF PRESIDENT GARRETT.

The following statement and declaration of policy were read by the President, JOHN W. GARRETT, Esq., and was unanimously adopted by the Board:

On the 13th April, the President presented his views regarding the policy to be maintained by the B. & O. R. Co., in the crisis arising from the extraordinary position assumed by the N. Y. Central Road, and the course he had felt it his duty to pursue, in competition with the Atlantic Lines, for the protection in a comprehensive view alike of the interests of the Company and of the City of Baltimore.

He had the satisfaction of receiving the unanimous approval of the Board of his action and the policy indicated.

Notwithstanding the general disapproval manifested by the press at the North, as well as at the South and West, and it is understood by a large portion of their stockholders, the managers of the N. Y. Central Co. have continued their quixotic crusade against the Southern roads, and against the City of Baltimore, to an extent which, whilst generally damaging railway property, is rapidly developing in such a contest the relative weakness of that line, and the strength and advantages of the Baltimore and Ohio road and its business.

It is due to the magnitude of the interests involved that a distinct statement should be presented of the issue made by the New York Central Co., and of the position occupied and maintained by that company, and the facts and reasons governing the latter, so that the serious responsibility of continuing a state of things producing most disastrous results to vast amounts of railway property, shall be properly placed. The N. Y. Central Co. demands that the rates from New York, Boston, Philadelphia, and Baltimore, to the commercial centers of the West and Southwest, shall be the same. The illustration of the case in connection with the City of Baltimore will exhibit the error and absurdity of the principle announced.

Cincinnati, as the leading city of the Ohio Valley, has commanded the most attention in the discussions of the Convention of the four Lines.

What are the relative positions of New York and the New York Central Co. and Baltimore and the B. & O. R. R. Co. to that city.

	Miles.
The distance from New York via the New York Central Road and the shortest Railway line to Cincinnati, is.....	880
The distance from Baltimore by the shortest Railway line to Cincinnati, is.....	582
Leaving the difference in favor of Baltimore.....	298
The entire length of the N. Y. Central Road, from Albany to Buffalo, is.....	298

It therefore clearly follows, unless the New York Central Road concludes to render the service for its entire length without any remuneration whatever, if the connecting roads of the B. & O. Co., in Ohio, can work at the same rates as the connections of the N. Y. Central, it must abandon its demand.

It has claimed great relative advantages during the season of River and Lake Navigation, and economy of working arising from low grades, etc.

What are the facts? Assume the use of the Hudson river to Albany, and of the Lake from Buffalo to Cleveland, yet the actual Rail transportation is, viz:

	Miles.
On N. Y. Central Road.....	298
And from Cleveland to Cincinnati.....	255
Whilst from Baltimore to Parkersburg, on the Ohio River, 200 miles below Pittsburg, the distance is but.....	383
Exhibiting the transportation by Rail from the city of New York to be.....	170

In favor of the Baltimore route, using the canal or sea from New York to Baltimore, making the Baltimore line the cheapest from the city of New York, and proving conclusively the absolute advantages of the location of Baltimore.

The errors of that Company are still more glaring as to relative ability for economical working. The subjoined statement furnishes the cost of fuel of the N. Y. Central and Baltimore & Ohio Railroads, for the past three fiscal years, derived from their Annual Reports, viz:

	Cost of Fuel to B. & O.	Cost of Fuel to N. Y. C.	Difference.
1856.....	\$201,669 39	\$768,523 21	\$566,913 83
1857.....	209,063 15	847,853 14	638,187 99
1858.....	167,550 64	706,903 37	599,352 73
	\$578,885 18	\$2,382,339 72	\$1,804,454 54
Average difference per annum.....			\$601,484 84

In consequence of the inexhaustible supplies of bituminous coal, at almost nominal prices, and of the most desirable character for the generation of steam, upon a large portion of the Road, the B. & O. Company has a permanent advantage over that Company in this great economy, which has proved to average an amount exceeding \$600,000 per year—a sum equivalent to dividends of 6 per cent. on the capital stock of this company.

During the month of April, notwithstanding the low rates of transportation forced upon the railway interests by the N. Y. Central Company, the profits of the road were satisfactory—its working expenses being but 47 per cent.

The results for the past month, however, are still more remarkable and interesting. All the power of that great corporation which for many years so largely dictated and controlled the railway policy of the country, has been wielded adversely for the interests of this road, and the fruition is a large reduction in its revenue, combined with immense losses through low rates arranged by its authority and dictation, whilst a decided increase in the revenues of the Main Stem of the road has been realized, as well as a slight aggregate increase of the entire revenues of the company, beyond the same month last year.

Combined with this extraordinary exhibition of the relative success and power of the Baltimore & Ohio Road, is the fact that with all advantages the working expenses for the month have proved but 44 76-100 per cent.

The public has practically approved the policy of the company in reference to reasonable and safe speed of passenger trains.

Thus whilst the New York Central has adopted a speed deemed by this Company reckless, dangerous and costly, in connection with which most serious results have occurred—involving on that road loss of life and limb—this company has maintained a speed of twenty-five miles an hour without accidents, making regular connections, and fully preserving its business—at large advantages also of economy in running.

The developments, therefore, exhibit the ability of this company to maintain its platform of protection of all the great interest confided to its charge, the commercial and geographical rights of Baltimore, and its dividend insuring capacity for its stockholders.

As this policy has met with the cordial sanction and support of the community, its shareholders and the Board, the Executive deems it proper to announce his continued determination to enforce and maintain the just advantages and rights of the city of Baltimore and of the Company.

PRUSSIAN LOCOMOTIVES.

The locomotives made by A. Borsig, of Berlin, attracted much attention at the Paris Exhibition, both by their arrangement—unlike that usual to English and French locomotives—and by their generally good workmanship. The works of this manufacturer are among the largest of their kind in the world, having completed 1,000 locomotives up to the 21st of August last, a day on which the work-people held a grand festival in commemoration of the delivery of the 1,000th engine, the "Borussia," to the Cologne-Minden Railway. Her

Majesty, when on a visit last year to Berlin, visited these works also, a circumstance which made them known for the first time to thousands in this country, who, otherwise, might never have been aware of their existence. A late number of the *Memoirs de la Societe des Ingenieurs Civils* contains an account by M. Gaudry, of the engines built by Borsig and by Woehlert (also of Berlin,) for the railway between Saarebruck on the French frontier and Menheim on the Rhine. These machines have mostly four coupled driving-wheels and a pair of leading wheels, all arranged, excepting in the passenger engines, between the fire-box and smoke-box. The cylinders are in every case outside and horizontal, the guide bars being placed one above the other in front of the leading-wheels. The springs of the driving-wheels are connected together by equalising or compensating levers, as in the American engines; this arrangement being used in engines with coupled-wheels throughout Germany. The boilers have the old fashioned pyramidal dome of the earlier Stephenson engines, with an additional dome also of good size, a little behind the chimney. The tubes are very small and very long, in one case as little as 1 9-16 in. in diameter, and 15 feet 3 in. long. Most of the working parts are of cast steel of the least dimensions consistent with strength, and M. Gaudry adds that the workmanship has been executed in the least details with a perfection equal to that which was remarked in Borsig's engines in the Exposition Universelle of 1855. The passenger and mixed engines do not appear to present any special features of interest beyond those named, the former being, to all appearance, in M. Gaudry's sketches, good serviceable engines, with 15½ in. cylinders, 22 in. stroke, four coupled driving wheels of 6 feet, 3 in. diameter, the boiler containing 152 tubes 1 9-16 in. in diameter, and 10 feet 7 in. long, and the whole machine weighing, in running order, 29.4 French tons, which is nearly the same as so many English tons.

M. Gaudry describes much more particularly, however, a class of tank-locomotives made by Borsig for the Saarbruck and Menheim line in 1855. These engines, if they do not possess any remarkable novelty of construction, are nevertheless interesting from their great size, and as types of German workmanship. The size of these engines is the more remarkable as it is stated that the line presents no gradients exceeding one in 200, with curves of a minimum radius of about 40 chains, the load imposed being that of 65 wagons, at a maximum speed of four German, equal to about 18½ English miles an hour. The engines have 18 in. cylinders, 27 in. stroke, and six driving wheels, each 4 feet in diameter, coupled a total distance of 11 feet 3 in. between the extreme axles. The boiler is 51½ inches in external diameter, and contains 209 tubes, 1 9-16 in. in diameter, and 15 feet 3 in. long. The inner fire-box is 4 feet 7 in. long, upon the grate 38 in wide, and 5 ft. deep from the crown to the grate. The entire heating surface amounts to nearly 1,400 square feet. Mr. Clark, the author of "Railway Machinery," who contends so ably for small chimneys, would grieve at the size of that in the great machine under notice—no less than 22½ in. in diameter. The whole length of the engine is 32 ft. 6 in., and its weight in running order 44.3 French tons. This, it is true, is not quite so heavy as the Vale of Neath engines, which weigh, we believe, 47 tons; but we must recollect that Borsig's engine is for the narrow gauge. The weight upon the leading wheels is 13 tons, that upon the middle wheels 15½ tons, and upon the hind wheels 15½ tons.

Only the springs over the middle and hind pairs of wheels are connected by compensating levers, the forward springs being attached directly to the frame.

The price of these machines was 19,200 Prussian crowns, or £2,880 each.

The staying of the enormous pyramidal dome over the fire-box is accomplished in part by eight hooks suspending the fire box from the inside of the dome, and besides by 22 transverse stay rods in three rows, and 23 longitudinal stay rods in two rows, connecting the plane surface. There are 633 stay bolts, or in all, 692 "pieces de consolidation." The very small tubes are ferruled with very thick ferrules at both ends, which, considering their length, makes it surprising that any draught can be maintained at all, excepting with a very close contraction of the blast pipes. The feed-water enters the boiler at bottom of the barrel near the smoke-box, it being mentioned that very pure water is used. The feed pipes are furnished with a number of blow-off or escape cocks, placed at every point where water would lodge, so as to guard against freezing in water.

The engines being intended for burning raw coal are furnished with a step-grate having ten steps, its slope being 30°, with three ordinary transverse bars at the bottom.

Each engine has an independent steam-pump, as is usual on all the State railways of Bavaria, Prussia, etc.

The fastening of the cylinder is remarked by M. Gaudry as being very weak, each cylinder being bolted to the frame through one vertical flange only, of 11 in. width, by twelve bolts 1.1 in. in diameter. The main frame is braced apart by the smoke-box, the sides of which come down between its bars. In Engerth's engines, on the Northern and Eastern Railways of France, the cylinders are not sufficiently stiff with a quadruple frame of strong plate iron and thirty bolts to each cylinder. The cylinders of the Crampton engines work in the frames, notwithstanding their sixteen bolts attaching them to the main frame bars, which are well braced together. In the later passenger engines upon the Lyons and Eastern Railways, various builders have not hesitated to strengthen the plate iron cross framing between the cylinders, and to supply two or three times as many bolts or rivets as have been used for fastening the cylinders of Borsig's great engine. This same weakness of cylinder fastening, M. Gaudry states, is general in all of Borsig's engines; and if it be true that the cylinders do not work loose, it can only be owing to excellent workmanship and the fact that the service is not severe.

The engine has a steam-brake, with shoes pressing directly upon the rails, the system of Laignel in France, and of many patentees in England. M. Guerard presented the same system some years ago to the Société des Ingénieurs Civils, and M. Flachet, the president, has adopted it in the locomotives running to Auteuil. The cylinder and piston are under the boiler, over the brake-shoes, between the middle and hind driving-wheels, which carry together more than 31 tons.

While M. Borsig and most of the other German locomotive builders give great strength to certain necessary pieces, such as the collars and bridles of the springs, valve gear, etc., one is struck with the very small extent of the wearing surfaces. Thus, the blocks of the cross-head have no more than 38½ square inches (250 centimetres carres) of surface in the very large machine under notice, an amount which is often exceeded, both in France and England, in engines with no more than 15 in. cylinders.

The tyres of the wheels are of Krupp's cast steel; and M. Gaudry observes that on the Manheim line it is customary to run these tyres under 40 tons coupled passenger engines until they are worn to more than ¾ in. in thickness.

In their general arrangement, Woehlet's engines are like Borsig's, with the exception that the fire-boxes of the former have the ordinary wagon top crown, instead of the pyramidal dome.—*London Engineer.*

GALENA AND CHICAGO UNION R. R.

ELECTION OF DIRECTORS.

At the annual meeting of the stockholders of the Galena and Chicago Union Railroad Company, held in this city, yesterday, the following gentlemen were elected Directors for the ensuing year:

Walter L. Newberry, William H. Brown, Chicago; William Larned, New York; Flavel Mosely, Chicago; Thomas D. Robertson, Rockford; Charles S. Hempstead, Galena; John Wentworth, Jason McCord, Chicago; Dexter A. Knowlton, Freeport; Orrington Lunt, Francis B. Cooley, E. K. Rogers, Jonathan Burb, Chicago.

Of the above, Wm. Larned received 27,910 votes, John Wentworth 27,924, Jason McCord 27,934, and Jonathan Burr 27,569; all the rest received 28,035. There were 438 votes cast for H. T. Dickey, 142 for Charles Walker, 41 for John B. Turner, and 28 for B. W. Raymond.

Before the balloting commenced, Mr. Turner, President of the Company, stated that he had some time ago tendered his resignation, to take effect at this date. He had no disposition to recall it, or to enter into a contest for re-election, and that he and his friends had no ticket to present.

Mr. Larned, of New York, addressed the meeting on behalf of the New York shareholders, disclaiming any personal feeling on their part against any of the gentlemen composing the old board, especially in reference to Mr. Turner. But a difference in their respective views of the interest of the road, and the proper policy to be pursued the coming year, suggested a change of administration. He tendered the thanks of the New York stockholders to the members of the retiring board.

The voting then commenced, the result being as stated above. Captain Turner and his friends, we understand, held stock and proxies to the amount of sixteen thousand shares, but the majority being strongly against them, they cast no votes.

The election of the above Board, it is understood, secures the early construction of the bridge at Clinton, and a close running connection with the Chicago, Iowa and Nebraska Railroad, now completed to within a short distance of Cedar Rapids. In fact, this is the point on which the election turned, and the occasion of Mr. Turner's withdrawal from the Presidency.

Captain Turner has been identified with the Galena and Chicago Union Railroad from the beginning. To his energy and indomitable perseverance are the people of the city and of the country through which it passes in great part indebted for its construction; and however much they may differ with him on the question of policy which has resulted in a change of administration, he will pass from his public position with no abatement of the high respect and good wishes of the public.

At a meeting of the newly elected Board, last evening, WALTER L. NEWBERRY, Esq., of

this city, was elected President; after which an adjournment was had until 10 o'clock, this morning, when the other officers will be designated.—*Chicago Press and Tribune.*

RAILROAD GRADIENTS.

On the Successful Working, by Locomotive Power, over Gradients of 1 in 17, and Curves of 300 feet radius, on Inclines in America. By Mr. T. S. ISAAC. [Read before the Institution of Civil Engineers, Nov. 23, 1856.]

It was stated that the road which had decidedly taken the lead in the United States, in the application of locomotive power to steep gradients, and had been generally the pioneer of improvements, was that extending from Baltimore, on the Chesapeake Bay, to Wheeling on the Ohio River, a distance of three hundred and eighty miles, through a region of considerable difficulties, especially in the various ranges of the Allegheny Mountains. This Company was incorporated in 1827, being the first chartered in America, and a portion of the road was opened in May, 1830. At first it was worked by horses, but locomotives were employed as early as August, 1830, —prior to the opening of the Liverpool and Manchester Railway. It was not until 1851 that the great incline over the main range of the Alleghenies was completed and worked by locomotives. It had an inclination of 1 in 45½ for 11 continuous miles, and, after winding among the summits of the mountains for twenty miles, it descended, on the western side, with an inclination of 1 in 45½ for nine continuous miles. The passage of this mountain chain involved altogether sixty miles of railroad, twenty miles of which had a gradient of 1 in 45½, and nine miles of 1 in 50, both worked by locomotive power, at a speed of from fifteen to twenty miles per hour for passenger trains, and from ten to fifteen miles per hour for goods trains. The curves were frequently 600 feet radius. Although it was one of the main thoroughfares of American commerce, no extra provision was made for working these inclines, beyond increasing the number of the engines. The engines had eight wheels, all coupled, the diameters of the cylinders being seventeen inches, the length of the stroke two feet, and the diameters of the wheels 4½ feet. The engines weighed 24 tons each, and the tenders 13 tons each.

In 1852 difficulties were encountered at two different tunnels, which rendered temporary inclines necessary, in order to accomplish the passage of the trains. This system was frequently adopted when it was required to surmount hills where the tunnels were incomplete, in order to enable the iron and other materials for the permanent way to be delivered along the line. There was a maximum gradient over the Kingwood tunnel of 1 in 10, and this incline was in operation for several months, the iron and other materials for upwards of forty miles of line, and the United States mails have been conveyed over it by locomotive power. The same engine that was used on the other parts of the line was employed, and it drew a loaded car, weighing 13 tons, and a tender weighing 12 tons, or a total weight of 25 tons, at the speed of 8 to 10 miles per hour. Over the Board Tree tunnel there was a series of zigzag inclines, on which the upward motion of the train was alternately reversed, the engine at one time pulling, and at another pushing the cars. There were three of these inclines on the Eastern, and five on the Western slope of the hill. The total length was nearly two miles and one-third, and the gradients varied from 1 in 18 to 1 in 15½, with a minimum radius of curvature of 300 feet. The ordinary freight consisted of

two loaded cars, weighing, together with the tender, 37 tons. Mr. Latrobe, the chief engineer of the line, said, in his report for 1853, that as many as fifty cars, containing 400 tons, and two passenger trains, had been taken over this hill in a day by four first class locomotives; and that, during five months, there had been no accident involving more than a trifling detention. These two inclines, although unprovided with engines especially adapted for the purpose, fully demonstrated the feasibility of traversing gradients, altogether unprecedented by the locomotive alone. The experienced gained in working them not only established the fact, that a rise of 300 feet per mile, and curves of 300 feet radius, could be worked with comparative facility, but seemed to point also to a limiting gradient, beyond which it was impossible for the locomotive to go, with any useful effect, even for a temporary purpose.

Steep gradients and sharp curves had since been adopted on the Virginia Central Railroad, on a more extended scale, and had been in successful operation for upwards of four years. The Mountain Top incline on this road crossed the Blue Ridge Mountains at Rock Fish Gap, in Virginia. This incline was fully described at p. 245 of the 65th Volume of the *Mechanics' Magazine*.*

The author believed that the resistance of the curves had been underrated in America. On the Mountain Top incline it was proved that the resistance of the curve exceeded 25½ lbs. per ton of engine and train. Mr. Latrobe had calculated that the resistance to traction, on a level, was doubled by a curve of 400 feet radius; and he assumed 13 lbs. per ton as the additional friction of the train, on a curve of 300 feet radius, whence the additional friction of the engine, due to such a curve, must have exceeded 49 lbs. per ton of its own weight. Two expedients have been resorted to for diminishing this friction. On the Baltimore and Ohio incline, for a speed of ten miles per hour, the outer rail had been gradually raised, on a curve of 300 feet radius, from 2 inches, the height given by the ordinary formula, to 9 inches. On the Mountain Top track inclines, for a speed of eight miles per hour, the outer rail had an elevation of 6½ inches; and a sponge, saturated with oil, was kept in contact with the flanges of the two forward wheels of each engine. These expedients had so far reduced the friction on the latter road, as to cause no perceptible diminution of speed on leaving a straight portion of the track, with a gradient of 296 feet per mile, and entering a curve of a radius of 300 feet, having a gradient of 238 feet per mile.

The Virginia Central Company had also constructed a shorter incline, about 100 miles further west, which was one mile and-a-half in length, with gradients varying from 250 to 300 feet per mile, and curves of a minimum radius of 400 feet. Over this incline, which had been in successful operation for two years, the common freight engines, on eight wheels, four of which were coupled, giving 16 tons for adhesion, had taken a load of 36 tons, at a speed of five miles per hour.

The ordinary performances of the engines on the Mountain Top Track, showed an exertion of 18½ horse power, including the engine in the load, or 118 horse power not including the engine; giving, in the latter case, 4.8 horse power per ton of motor, the resistance due to the speed and the gradient being 121.64 pounds per ton.

On one or two occasions, on the incline of 1 in 10, on the Baltimore and Ohio line, the

weight of the engine being four and three quarter times the resistance of gravity and the friction of the load, when the rails were very greasy, the engine and train slid backward with locked wheels, from near the top to the bottom of this incline, without damage. The wheels of these engines had chilled tyres, a circumstance which considerably decreased their adhesion. The engines on the Mountain Top Track, with an ordinary train, exercised an adhesive power of one-sixth of their weight, and this could always be maintained, in the severest weather, by the use of a fine clean sand.

In conclusion, the author remarked, that there were probably few mountain passes that could not be overcome by the introduction of gradients of 1 in 17, and experience had satisfactorily proved, that the locomotive could draw a load nearly double its own weight up such a gradient, at a speed of eight miles per hour. The working of the Mountain Top Track furnished additional evidence to that already gained from other sources, of the superiority of light engines with light loads, over heavy engines with heavy loads.—*London Mechanics' Magazine*.

ON THE MANUFACTURE OF OILS FROM COAL, AND THE EXTRACTION OF OTHER NEW ARTICLES.

Only a short time has elapsed since the distillation of oils from coal has become known in this country, and this branch of industry begins now to attract general attention, not only here, but all over Europe. Your readers will, perhaps, feel some interest in knowing how these different oils and other articles are extracted from coal, as well as to learn to what different uses the same can be applied. Engaged as I am in the branch of chemistry, applied to industrial purposes, I was delighted to receive your valuable journal, as a new sign of life from the heart of this beautiful country, and I shall be pleased if you will give publication to articles I intend to send you from time to time—communications which, I hope, will prove useful to your readers.

The quality of coal generally used in this country for the extraction of oils is the so-called "Cannel Oil." It is of a very firm, compact structure, mostly of a brownish-black color, and of a slaty appearance, without luster. This coal, which in Scotland is called "Parrot Coal," burns with a very brilliant light, and was in England sometimes used as a substitute for candles, a practice which has led to the now universally adopted name of "Cannel (candle) Oil." It does not soil the fingers when handled, and admits of being polished, snuff-boxes, bracelets and other ornaments having been made of it.

Opinions as to the origin of this Cannel Coal are various. I have lately examined some specimens from Canfield, Ohio, of Mrs. Sherwood & Brayton's coal banks, and, after I had subjected the coal to dry distillation, I found the coke remaining in the still presenting the same firm, woody structure as charcoal made from the wood of the palm-tree! This coal yielded next a great quantity of oils and paraffine, (coal-wax), also a considerable quantity of excellent illuminating gas.

This Cannel Coal is put in properly arranged retorts, and subjected to dry distillation. The following is the chemical process going on when the necessary heat is generated under the still:

From the moment in which the elements (the elements of Cannel Coal are carbon, hydrogen, oxygen, nitrogen, potash, with some

admixture of silica, and sometimes a trace of sulphur,) are forced by the heat to abandon their former state of equilibrium, the formation of new products commences, which is due to three different causes—the temperature; the degree of chemical affinity amongst the elements being in some instances increased by electric action; and thirdly, by their volatility. Hydrogen and oxygen possess this property to a very high degree; it is not so with carbon. There is a tendency, therefore, in the former to separate and pass off in the form of gas, but chemical affinity obliges both to unite, and form compounds, partly with each other, partly together or single with carbon. Hydrogen and oxygen, if not interfered with by some other agent, combine to form water; the excess of hydrogen takes up as much carbon as the temperature admit of, forming olefiant gas, carbureted and bicarbureted hydrogen, while the united action of the other elements upon the carbon gives rise to other ternary compounds. Any one familiar with chemistry will agree with me when I assert that the nature of this process admits of the production of such an innumerable series of bodies, that they will never be exhausted by science—as many as there are mathematical combinations, binary and ternary, depending upon the temperature. I give this somewhat lengthy description that the chemical action may be better understood.

To the still a coiled iron worm is attached, in which the different gases condense to a liquid, afterward purified with different chemicals. The following are the products which gradually, and under different temperatures, pass from the condensing worm.

The first liquid is *Naptha*, a very light, volatile, and highly inflammable oil; it is extensively used for dissolving caoutchouc, or India Rubber; it is a highly recommended remedy for rheumatic pains, and, when purified and redistilled, it is used to dissolve resins and gums for the manufacture of varnishes. It can also be used for the extraction of perfumes from flowers. By a different treatment this *Naptha* is converted into "*Benzole*," which oil promises to become of great commercial importance. Wool, silk and other fabrics can most effectually be cleaned from the adhering fatty oils and grease by simply steeping them in "*Benzole*." In England, France and Germany this liquid is already very extensively used and preferred to alkalies because "*Benzole*" does not impair the colors, and is free from any resinous impurity. By treating *Benzole* with nitric acid, "*Nitro Benzole*" is formed, which can be used as a substitute for essence of bitter almonds in perfumery.

The next fluid coming from the still is a light oil, now so extensively used under the names of "*Kerosene*," "*Coal Oil*," or "*Carbon Oil*," to burn in specially adapted lamps. This oil is not explosive, and, properly purified, has an agreeable odor and burns without smoke. *The time has come when steam-boilers on land and sea, stoves, furnaces, etc., are heated with this fluid!* I have lately patented a lamp to create heat under boilers with less expense than now done by coal itself.

Wood, when impregnated with this liquid, is preserved from decomposition. Re-distilled, another highly interesting article, "*Creosote*," or "*Carbolic Acid*," is extracted, which possesses the extraordinary property of preserving meat, and other bodies liable to decomposition, from putrefaction—a quality highly important to surgery. "*Carbolic Acid*" added to tannin extracts, hitherto so difficult to keep, will prevent the same from separation. From *Carbolic Acid* another fluid is produced, "*Carboazotic Acid*," which gives a beautiful,

* See Journal of the Franklin Institute, Vol. xxxiii, page 217.

permanent, *straw-yellow* color to silks and other fabrics. The intense bitter of this acid has induced physicians in London and Paris to try it as a *febrifuge* and several cases of *intermittent fever* have been successfully treated.

The third substance coming directly from the still is a heavy, fatty oil, which, when properly refined, gives the *Lubricating Oil*, now very extensively used to grease machinery. This heavy oil, when exposed to cold, produces *paraffine*, or *coal-wax*, a beautiful white substance, in scaly crystals; these are subjected to pressure and then molded into candles, burning with a most brilliant and steady white light, superior to any sperm or composition candles.

From the heavy oil, another interesting product can be extracted, namely, "*Kyanol*," or "*Aniline*," which gives with bleaching powder and another agent, a most beautiful *blue dye*, equal, if not superior, to indigo. By a different treatment a fine *red coloring agent* is produced.

The *coke*, which is left in the distill, is used as fuel, and, when for some time in contact with iron, I have found that, by a proper treatment, *Plumbago* of superior quality can be made out of it.

The *Ammonia* water formed also at the distillation, is bound by the sulphate of lime, which is formed in the purification of the oils, and, mixed with other very cheap ingredients, produces "*Guano*" of excellent quality.

Visiting the different Gas-works in this country, I find that a great field is open for improvement. In several cities, the tar is burned as fuel under the retorts; the sulphate of lime is taken away by those parties who furnish the oyster-shells, and the ammonia is conducted into the basin! How useful and profitable could not this refuse be made?

From this sketch the reader will be able to form an idea of the part "*KING COAL*" is bound to play, and how important the development of this branch of industry will become to the coal-mining States, as the extraction of oils will in future not be exclusively confined to "*Cannel*" Coal, but will also be, as I have demonstrated by my own *ELECTRIC process*, extending to the bituminous, and even anthracite, coals.

E. L. FLEURY.

When the railroad, the Mobile and Girard, was first talked of in his settlement. Old Blizzard was high for it. The line of the road would come near his plantation and dispensed with the wear and tear of his wagons through the prairies of Montgomery. One day an agent of the Railroad Company called on him, took dinner with him and talked enthusiastically about the road to him. As the agent was about leaving, he drew his subscription book, and said: "Well, Mr. Blizzard, what amount shall I put down as your subscription to our great enterprise?"

"Wal," said old Blizzard, "I've just got thirteen hundred rails, new and good rails, split out, and by the time you folks will want 'em, I'll have about as many more. You may put me down for three thousand rails, any how."

"We do not want the rails Mr. Blizzard," said the agent, smiling; "we wish our friends to purchase, or rather to help us to furnish iron rails. What amount of money will you give us to help us buy iron rails?"

"Iron rails, be durned! Ef yer 'goin to go inter such unnatural like extravagance as that, I shant gin yer a dollar. Iron rails? Well, for sure, who ever heerd o' the like!" and so old Blizzard left the railroad agent in disgust, mumbling to himself as he went away: "Iron rails, be durned."—*Mont. Mail*.

MONETARY AND COMMERCIAL.

Since our last issue there has been a small but constant increase in the demand for money, with a corresponding decrease in the supply of currency. This transition from the easy state of the market three or four weeks ago, and the present time, has been small from day to day, but in the aggregate has amounted to considerable. The tide must soon turn, and the money sent out at that time for the hoarded up surpluses of grains held by the farmers for better prices, will, in a short time, find its way back to the coffers of our merchants, which will inaugurate a more easy and to the borrower, more pleasant, state of affairs. There has been no increase of bank rates, but the discount houses have been unable to supply the wants of their customers, this has thrown considerable good paper on the street, and produced a corresponding rise in prices. Street rates may be fairly quoted at 18 to 24 per cent.

Eastern Exchange is in fair supply for the present moderate demand at $\frac{1}{2}$ to $\frac{1}{4}$ prem.

The *Courier and Enquirer* of Monday says:

The pressure upon the Money Market is clearly indicated by the pressure upon the Bank vaults for coin. This is more clearly defined by the rate of foreign Exchange; and, under the circumstances, the Banks have acted wisely in commencing such a course of curtailment as will secure a stronger reserve in gold.

The Bank statement for the week shows a larger reduction of deposits than was anticipated. The Banks have realized specie for a material portion of Treasury notes held over. Specie is also coming in from various points in the interior, the averages for the six days ending the 11th inst., showing the following result:

In Loans, a decrease of.....	\$2,047,000
In Specie, a decrease of.....	1,536,000
In Circulation, a decrease of.....	36,000
In Deposits, a decrease of.....	3,695,000

RATES OF FREIGHT FROM NEW YORK TO THE WEST.—

The four Trunk routes to the West have again patched up peace, and rates of freight and passage were advanced today to the following prices:

FREIGHT.				
	1st class.	2d.	3d.	4th.
Cincinnati, per 100 lbs.	112	84	57	44
Chicago, " "	120	90	62	47
St. Louis, " "	155	119	82	62

PASSENGERS.

To Buffalo.....	\$ 3 00
To Detroit.....	15 00
To St. Louis.....	30 00
To Cincinnati.....	20 00
To Chicago.....	23 00

Cattle freights are 75 cents to Albany from Buffalo. The rates of freight on the low classes are not as high as they should be, but such charges were necessary in order that the New York Central could compete with the canal. With the light of precedent before us, and knowing the incongruous elements in the agreement, we do not see the seeds of long life in the new compact. Self-preservation may keep the managers of the roads in the traces for a while, but one party to the arrangement entered into it too unwillingly to be other than restive, and we shall, no doubt, in a few days begin to hear the usual charges of cheating, &c.—[N. Y. Tribune, 13th.

The new President of the La Crosse and Milwaukee Railroad, has published an address to the stockholders, in the columns of the *Milwaukee Wisconsin*. He says that the increase of the debt of the Company in 1857, was \$11,568, 101, and in 1859, \$6,301,945—total debt, \$17,870,046.

Bad as this showing is—and the condition of the Company is no doubt full as bad as it is represented to be in the reports—I am of opinion that something may yet be saved to the stockholders, if what there is left of the insolvent skeleton is properly husbanded, and some of the pretended, but fraudulent liabilities cut off. From the light now before me I shall advise the Company to contest and have set aside:

1st. The two millions of third mortgage bonds under which the foreclosure has taken place, and which I have already charged in a bill in chancery as being fraudulently issued, and for which I have reason for believing the Company has never realized five cents on the dollar.

2d. The one million of bonds issued to bribe public officers and lobby men, known as Corruption bonds.

3d. The one million of bonds of a like character of the above, and issued for like purposes, known as the Barstow bonds.

4th. The one million of bonds called the Second Mortgage Bonds, on the Eastern Division of the road.

5th. The second issue of Land Grant Bonds amounting to \$15,000,000.

6th. The issue of \$395,000 on the Second Land Grant Mortgage.

7th. The judgment of Selah Chamberlain amounting to over \$700,000, and his lease, which is a damage to the interests of the stockholders still more than the amount of the judgment.

8th. And the prosecution and setting aside of all other fraudulent or dishonest liabilities, which I shall discover on getting the books and papers of the Company in my possession.

RAILROAD EARNINGS.

The receipts of the Harlem Railroad Company for the month of May are as follows:

1859.....	\$77,667 57
1859.....	91,868 62
Net increase.....	14,201 05

The above are the net receipts after deducting all charges. This is very favorable, and should give stockholders great confidence in the ultimate value of their property.

The business of the Illinois Central Railroad for May, 1859, was as follows:

LAND DEPARTMENT.

Total sales during the month.....	2,598 76 for	\$43,996 82
To which add town lot sales.....		1,015 45

Total of all.....		\$45,012 27
Acres sold since Jan. 1, '59.....	15,245 78 for	\$223,608 65
Acres sold previously.....	1,229,835 33 for	15,637,148 95

Total.....	1,245,081 11	\$15,860,757 60
Construction Bonds canceled in May, 1859.....		\$32,000
Construction bonds canceled previously.....	1,048,500	
		\$1,080,500 00

Free Land Bonds canceled in May, 1859.....	6,000	
Free Land Bonds canceled previously.....	132,000	
		138,000 00

Total bonds canceled up to May 31, 1859.....	\$1,218,500 00
Cash receipts, May, 1859.....	\$51,580 28
Cash receipts since Jan. 1, 1859.....	229,965 17
Total cash and bonds received to May 31, '59.....	\$2,904,762 70

TRAFFIC DEPARTMENT.

Receipts from Passengers.....	\$50,410 21
" " Freight.....	70,578 95
" " Mails.....	6,368 52
" " Rent of Road.....	5,450 00
" " Other sources.....	4,082 98

Receipts in month of May, 1859.....	\$139,771 47
Receipts in month of May, 1858.....	161,090 34

Total receipts since Jan. 1, 1859.....	\$705,157 42
Total receipts corresponding period, 1858.....	751,460 52

The earnings of the Cincinnati, Hamilton and Dayton Railroad, for May, compare as follows:

May, 1859.....	\$42,086 23
May, 1858.....	32,896 57

Increase, 1859..... 9,189 66

The following are the receipts of the Pittsburgh, Fort Wayne and Chicago Railroad for the month of May, 1859, compared with the month of May, 1858:

For May, 1859.....	\$119,909 11
For May, 1858.....	115,404 79

Gain in 1859..... 4,504 32

The annexed are the May earnings of the Chicago, Burlington and Quincy Railroad:

Freight.....	\$59,655 75
Passengers.....	27,978 60
Mail and Miscellaneous.....	1,628 33

Total.....	\$89,262 63
Operating expenses estimated.....	50,000 00

Net earnings.....	\$36,262 63
Gross earnings per mile.....	557 89

Between Chicago and Burlington, 210 miles:

Freight.....	\$67,291 82
Passengers.....	33,303 91
Mail and Miscellaneous.....	1,996 83

Total..... \$102,599 56

Between Galesburg and Quincy, 100 miles:

Freight.....	\$12,893 62
Passengers.....	12,117 58
Mail and Miscellaneous.....	890 00

Total.....	\$25,901 20
Total for 310 miles.....	128,500 76

Earnings in May, 1858.....	\$130,995 68
Decrease in 1859.....	2,494 92
Earnings per mile.....	414 18

REDUCED FARE AGAIN.—The railroad fare between Cleveland and Buffalo has been put at \$4. Through tickets to New York will have to be sold at \$12, in order to give through passengers the benefit of the reduction.

As this will make the through fare to New York via Cleveland a little less than via Pittsburg, the managers of the latter route will need to give the matter immediate attention.

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WM. SUMNER & CO., cor. Fourth and Walnut Streets, second floor, Cincinnati, Ohio.

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The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being ALIKE ON BOTH SIDES, impossible to ravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

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172 Elm Street, bet. 4th and 5th,
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SUCTION & FORCE PUMP

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Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions. Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair, Ohio Mechanics' Institute. June 18, 1855—15

Commencing April 11, 1859.

LITTLE MIAMI

—AND—

COLUMBUS AND XENIA



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FOUR TRAINS DAILY.

Three Through Express Trains.

FIRST TRAIN—No. 1 Express, at 6 A. M., connects via Columbus and Cleveland; via Columbus, Crestline, and Pittsburg; Detroit via Cleveland and Steamers. This train stops between Cincinnati and Columbus, at Loveland, Deerfield, Morrow, Xenia, Cedarville, South Charleston, London, and West Jefferson.

SECOND TRAIN—No. 2 Express, at 8 A. M., connects via Columbus, Bellair, and Benwood; Wheeling, via Columbus, Steubenville, and Pittsburg; via Columbus, Crestline, and Pittsburg; via Columbus and Cleveland; Detroit, via Cleveland and Steamer; Springfield. This train stops between Cincinnati and Columbus at Plainville, Milford, Loveland, Morrow, Spring Valley, Xenia and London.

THIRD TRAIN—Accommodation, at 4:40 P. M., for Columbus and Springfield.

FOURTH TRAIN—Night Express, at 11:30 P. M.; connects via Columbus, Bellair, and Benwood; Wheeling; via Columbus, Steubenville and Pittsburg; via Columbus, Crestline and Pittsburg; via Columbus and Cleveland. This train stops at Loveland, Morrow, Corwin, Xenia and London. *Sleeping Cars on this Train.*

No. 1 Express through to Cleveland without change.

The Night Express Train, leaving Cincinnati at 11:30 P. M., runs daily, except Saturdays. The other trains run daily, except Sundays.

For all information and Through Tickets to Boston, New York, Philadelphia, Baltimore, Washington, Buffalo, Niagara Falls, Dunkirk, Cleveland, Pittsburg, Wheeling, and all Eastern places, please apply at the offices, Walnut Street House, No. 1 Burnet House, south-east corner of Broadway and Front Streets, and at the Eastern Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

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Leave Wheeling daily at 8:05 P. M., and 11:30 A. M. Direct connections are made by these trains

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Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2.

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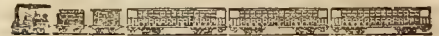
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Distance 110 Miles and No Change of Cars Between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS LEAVE CINCINNATI daily, (Sundays excepted,) from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6 A. M.—Chicago and Terre Haute Day Express—Through to Terre Haute, Lafayette, and Chicago, with but one change of cars.

SECOND TRAIN, 4:15 P. M.—Accommodation—The 4:15 P. M. train arrives in Indianapolis at 10:10 P. M.

THIRD TRAIN—Chicago and Terre Haute Night Express—8 P. M.—Arrives at Indianapolis at 1 A. M. This train runs through from Cincinnati to Chicago, with but one change of cars.

The above trains make close connections at Indianapolis, Lafayette and Chicago,

WITH TRAINS FOR

Terre Haute,	Lafayette,
Springfield,	Jacksonville,
Rock Island,	Danville,
Galesburg,	Burlington,
Keosauqua,	Milwaukee,
Mattoon,	Pana,
Naples,	Peoria,
Galena,	Dunleith,
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Late Assistant Post-Master at Cincinnati.
Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.
U. S. BLANK AGENCY, CINCINNATI POST-OFFICE, }
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This work has been carefully compiled and corrected by E. PENROSE JONES, Esq., late Assistant Post-Master of the Cincinnati P. O., from the Records in this Department, and other sources, and contains the most complete list of Post-Offices especially of the Western, North-Western, and South-Western States, yet published.

MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an active pamphlet of about 100 pages. The entire matter is kept standing in type, and as the compiler is promptly advised of all New Offices, Changes and Regulations of the Department, the information is corrected up to the last day of publication, an advantage possessed by no other work of the kind.

ONSERVE, That this list is arranged by States and Counties, making it especially valuable to business men. No similar arrangement has been published since 1856. There are 3000 more offices in this than in any book heretofore issued. The Price is one-half that of any work of the kind now published.

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Mar 10. 1859.

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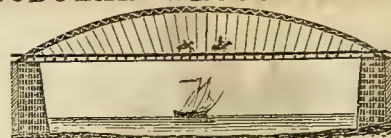
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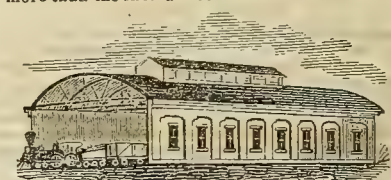
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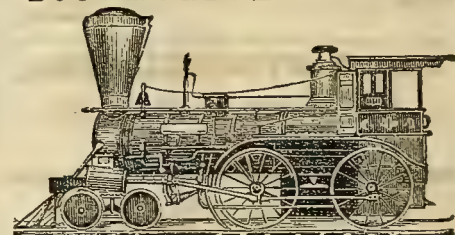
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We can furnish iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

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P. DUDLEY,
President of the Board,

Jan 5th.

The Railroad Record.

E. D. MANSFIELD, } Editors.
T. WRIGHTSON, }

CINCINNATI:

Thursday Morning, June 23, 1859.

THE RAILROAD RECORD,

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Subscriptions and communications addressed to
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Publishers and Proprietors.

IF The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

IF Railroad Presidents, Superintendents and Secretaries, are requested to send us copies of all Annual and other Reports they may issue, together with their Monthly Statements, and such other matters of interest as they may be willing to furnish us.

LAKE VIEW HOUSE, CHICAGO.—This commodious and retired Hotel, delightfully situated upon the north side of the Chicago river and about five miles from the city upon the borders of Lake Michigan, has recently passed into the hands and under the management of that model landlord, H. W. CHESTER. A drive out to "Lake View," appears now to have become one of the necessities of Chicago life—at least such was the impression we received upon a recent visit to the prairie city. A few hours of quiet, among the breezes, fresh from a frolic upon the lake,—in social converse with friend Chester, will do much toward restoring to active usefulness the worn out man of business, and add to the enjoyment of the tired traveler.

IF Among the pleasant recollections of our recent visit to Chicago, is a visit to friend FOWLER, Editor of the *Western Railroad Gazette*. We found him up to his eyes in "Exchanges," "Copy," "Correspondence," and "Proof," which he shook off upon our approach, took his hat and his staff, and sallied out to show us the *Quadruped*. We saw the *Animal*!

IF We send this number of our paper to a number of gentlemen who are not now subscribers. We hope to add some of them to our list.

VOL. 7.—No. 18.

THE R. R. EXCURSION TO CHICAGO.

On Wednesday morning, the 15th inst., at 6.05, the "solid men," of the Queen City, to the number of about 800, accompanied by a full representation of the City Press, and Menter's Cornet Band, left upon the Cincinnati, Hamilton & Dayton Railroad Excursion trains for Chicago.

The weather was as propitious as could possibly have been desired, the rain of the evening before having thoroughly laid the dust, and brought out in beautiful colors the glowing verdure of the Miami Valley.

As the trains passed along new cars were attached; at Dayton, Troy, Piqua, Lima, etc. and at every station, the Excursionists were received and cheered by crowds, who appeared quite as enthusiastic, as ourselves, at the opening of this new and important connection by rail with our sister city of the West. The trains passed from Cincinnati to Chicago without change of cars, which will always be a great consideration with travelers.

At Valparaiso the excursionists were met by the reception committee sent from Chicago to escort them into town. The gentlemen composing the committee passed through the cars making the acquaintance of their visitors and enlightened them as to the proposed proceedings of the evening and the morrow.

On our arrival at the depot we found forty-seven omnibuses waiting to carry us to the various hotels, but as their capacity was limited, they were found entirely inadequate for the emergency. Many were taken to the hotels in private carriages, while others took the more primitive system of locomotion, and walked into town. All the hotels were filled to overflowing, and many found a stopping place at the private residences of their friends.

After supper was over the Excursionists assembled at the Tremont House, (which continued the head quarters of the Cincinnatians during their stay,) and Menter's Band gave us some fine music, we were also "talked to," by General Leslie Combs, of Ky., our Judge Carter, and Hon. Stephen A. Douglas, of Ills.

On Thursday morning the great feature of the occasion came off, and was styled in the programme—

THE MUNICIPAL COURTESIES.

The formal reception took place at about 10 o'clock on Thursday, at the Tremont House. Mayor Haines and the Common Council proceeded to the North balcony, while on Lake Street was an immense crowd. The Mayor then addressed Mr. Eggleston, the Chairman of our Board of Common Council, in a neat speech, of which the following is an abstract:

In behalf of the citizens of Chicago, I bid you welcome on this joyous occasion; an occasion unlike those in times gone by, when the means of communication between cities were by artificial canals. We can say justly that railroads are the iron bonds of marriage between two great cities. You have assembled to settle that marriage, and we bid you a warm and heartfelt welcome to our homes. We hope that the consummation of this new railroad enterprise will be fruitful in a commercial, social & official point of view.

We hope that you will find much to attract, and will enjoy that degree of pleasure which will enable you to say when you return home that you have met such a welcome as you anticipated. We know how to extend hospitality, as we have experienced it in your own city. We found kind hearts and a warm welcome. We found a city of 200,000 inhabitants, with well paved streets, elegant blocks, compact stores, delightful surroundings, and a beautiful river flowing at its feet, and all of us when we left your city, resolved to follow your example in beautifying our surroundings.

MR. EGGLESTON'S REPLY.

This warm and cordial welcome takes me by surprise. We did not expect that we came as the invited guests of your city, but of the three railroad lines connecting your great city with the Queen of the West. It is useless for me to say anything in praise of the roads by which we came. You all know the manner in which Mr. L'Hommedieu has constructed and conducted the Cincinnati, Hamilton & Dayton Railroad without one dollar of State or city aid. At Dayton we came upon the Dayton & Michigan road. This road has seen severe struggles. It has been bending and bending but has never broken. It has been completed as far as Lima, and in connection with the Pittsburgh and Fort Wayne Railroad, connects Chicago and Cincinnati. And let me say that these roads are in first rate order; that we expect to patronize them and receive from you whatever you possess, and send to you whatever you do not possess. These bonds must keep us together. If commerce went keep the ties cemented, then you must give us your sons for our daughters or your daughters for our sons.

Again I thank you, Mr. Mayor, that the corporate authorities have received us and trust we feel the liveliest interest in your city. You have a great city, surrounded by a vast prairie. Some twenty years ago, when I was in business in Cleveland, we used to send occasionally a barrel of pork to the little town of Chicago. We can beat you in pork, but when it comes to grain, we lay down the spoils. We would be large if we had room. We have as good mechanics as there are in the West. We have a fine set of merchants, and are a solid town. In the days of financial embarrassment, we stood it like majors, and we have very few mortgages on real estate; we are a go-ahead people in fact.

After again thanking the citizens of Chicago for their courtesies, Mr. Eggleston gave way for Judge Douglas, who was introduced by Mayor Haynes, and spoke somewhat as follows:

JUDGE DOUGLAS' SPEECH.

I have been deputed by the citizens to respond and to extend a cordial invitation to you, who have honored us on this occasion. It is a source of peculiar gratification to see you here in view of the objects which have brought you together. Another great work has been consummated, and two great cities connected. We rejoice in it as a source of profit and mutual advantage. Chicago and Cincinnati are not rivals. They stand on different lines of trade and are engaged in different occupations.

Your Mayor [Mr. Eggleston] is not Mayor, but President of the City Council, says you have the best mechanics, and if we may judge at all from the specimens of their work, we incline to the same opinion. Cincinnati is a great workshop, with a few packing houses scattered around to feed the workmen. There is no better place than in Cincinnati to manufacture, and no better place than Chicago to distribute. You manufacture the goods, send them to us and we will sell them for you and will remit a part of the profits to you.

We welcome our friends from Kentucky and Indiana, and exchange congratulations. We know no State boundaries when our affections are involved. We recognize all as citizens. We trust that other cities will be as prosperous as ours have been in the lines of commerce. There are more railroads concentrating here than in any other cities on the globe. Go to London, Paris, Moscow; they all dwindle into insignificance when compared with the railroad importance of Chicago and Cincinnati.

We have a right to be proud of these railroad connections; proud that in young America we have more railroads than in all the rest of the world. And yet they are not half completed. There is much to be developed. Twenty-five years of growth and expansion in the same ratio as during the last quarter century, and there will not be a vacant acre between this and the Pacific. We hope to convert this vast expanse from barbarism to civilization. We want the mines of the Rocky Mountains to pour forth their wealth, and we will clothe and feed the miners. We have a common interest. They are our brethren and our kindred.

Therefore should we encourage these railroad lines. They are not finished until they cross the Mississippi, span the Missouri, and scale the Rocky Mountains, and connect with the ships for China. These works are progressing rapidly, but no faster than the country demands. We never shipped a cargo of corn to Buffalo until 1847, and now we are the great granary of the world. When I visited Odessa, I inquired the greatest amount of grain shipped on the Black Sea in one year, and found it to be fifteen million bushels. When we fail to ship twenty-five million bushels, we think the crops are failing.

We have no jealousy of your greatness; no rivalry except to open means of communication; to make the city and country flourish; to make it all American, and to feel a common pride. This valley is destined to be the great heart of this Republic. Providence ordained that the first settlement should be made in New England, and wisely, for if the settlers had been on these rich and fertile prairies, how would they ever have had the courage to subdue the forests of New England? It raised up a hardy race of men to contend with the savages and the forests, and to carry civilization to the Pacific ocean.

Let us cultivate these kindly feelings. Let us celebrate

the opening of all railroads. Let us make and receive visits. It will make us more American, and join us in one common fraternity. It will blot out all lines of North, South, East, and West. We shall all be brethren, giving allegiance to one constitution.

Chicago sympathizes with all improvements. She is situated on the lakes which flow into the Gulf of Mexico. We claim a right to navigate into the ocean and into the gulf. We hold the South in one hand and the East in the other. Disunion can never happen. It can not dissolve without tearing asunder Ohio, Indiana, and Illinois, and this is impossible. Let us pursue a line of policy doing justice to every part of the country.

Again I welcome you. All our excursionists who went to your city fell in love with your hills; some of them fell in love with your wines; our young men fell in love with your daughters—in fact, Chicago fell in love with Cincinnati, and I don't know what would have become of them if they hadn't gone to Kentucky and said that they found the prettiest horses and women in the world there.

We have a glorious future before us. All Europe is watching us—one-half in sympathy and the other half in fear of our example. Let all Europe fight if they will, but let America remain neutral; let her feed and clothe them and make money out of them. This is our policy. It is our mission to develop what we have; to show that we deserve more, and Providence will give it to us when we are ready to use it.

After again extending the welcome, Judge Douglas gave way to Judge Carter of Cincinnati, who made a speech in response, which was often enthusiastically applauded. The Judge closed with the following sentiment, which was loudly cheered:

The City of Chicago, the Gem of the Lakes, and the City of Cincinnati, the Queen of the West; may the bonds of friendship between them made firm this day, never be broken, and may they both go on increasing with a generous spirit of emulation, in commerce, in intellect, in morality, and in patriotism and love of union.

The veteran Gen. Leslie Combs followed in a capital speech, full of rich humor and overflowing with the General's ready wit, sharp points, racy descriptions and eloquent bursts. Any publication of it would only mar its beauties. After keeping the large crowd in shouts of laughter for about fifteen minutes, the General retired amid the most enthusiastic applause.

Menter's Band again filled the air with their fine music, and the vast assemblage slowly dispersed, each to follow his own mode of amusement for the day.

The Regatta was the first arrangement in order after the reception, and under the able command of C. Y. Richmond, Esq., the fleet of yachts entered for the prizes offered by the "Model Yacht Club," were started at 11.22½; the second class boats receiving fifteen minutes, seven and a half at starting and allowed seven and a half coming in.

The boats entered are as follows:

FIRST CLASS.

Schooner Navigator. Sloop Gipsy.
Sloop Edwin True. Sloop Anne.

SECOND CLASS.

Schooner Sylvan Queen. Sloop Jennie.
Sloop White Swan. Sloop Lilly.
Sloop Aeolus. Sloop Flying Dutchman.
Sloop Duck. Sloop Cat Owl.

A strong topsail breeze was blowing at the time, and fears were entertained for the safety of the little cockle shells. At 11.30 the first class yachts were started, and at noon the whole fleet was hull down—the Owl, a second class boat, leading some distance to windward, and the three first class boats making good time, with the Anna leading, she having recovered from an accident which occurred at starting, and which came near making a perfect wreck of her. She passed all her competitors of the first class within a distance of three miles, (the race was fifteen) rounded the

first stake—both solitary and alone in magnificent style, overtook and passed all but one of the yachts which first left the pier, and won the prize of 100 dollars with admirable ease and *sang froid*. She is a splendid yacht, and has the reputation of being the best sailor and sea-boat of her tonnage on the lakes. She was built last winter by P. T. King, and this was the first regatta in which she has been engaged. Her model is peculiar and well adapted for fast sailing.

The Fine Art Exposition was densely crowded with visitors.

In the evening the buildings occupied by Rounds & Langdon's Chicago Type Foundry, was brilliantly illuminated.

An interesting feature in the day's programme, was the trial of steam fire engines. The striking of the Court House bell had been agreed upon as a signal for the starting. The signal was given at one o'clock, and the engines started with the following results:

Atlantic, corner of Michigan and Wolcott streets, in the north division torch set to furnace at starting, hitching time 40 seconds, running ten blocks, stream on building in 7 minutes 25 seconds.

Long John, La Salle street, near Washington, same preliminaries, time 8 minutes 20 seconds.

The Island Queen started from the corner of Clinton and Washington streets, west division, and although detained by opening of the bridge, ran the same distance and got water on in 9 minutes and 10 seconds.

The Enterprise started from the Armory, was detained by teams, and made about the same time as the Island Queen.

The performances were considered very creditable.

The moonlight excursion on the steamer Planet took place, the excursionists, accompanied by many citizens, departing about four o'clock P. M.

The "Planet" left her dock amid the cheers of a large crowd of people who were assembled on the wharf. Two bands were on the decks. "Light Guard," and "Menter's Cornet." As we left the dock the Light Guard Band struck up a lively air, and the steamer went through the harbor in gallant style. After the Light House was passed, "Menter's" band gave us the "Anvil Chorus," and gave it in effective style.

Every one was in the best of spirits. The music was brought in *apropos*, and added life to the scene.

After the steamer had got well under way, the party were summoned to the ladies cabin, to participate in a dance. Both bands were in attendance, and the dance "went merrily on." The "Lancers Quadrille" was admirably done, and it was indeed a "gay and festive scene."

The steamer proceeded within about three miles of Waukegan. About the time of turning about, the Cincinnatians assembled in

the lower cabin and organized a meeting as follows:

STEAMER PLANET, LAKE MICHIGAN,
CHICAGO, June 16th, 1859.

A meeting of the guests of the citizens of Chicago on board the steamer Planet was held this afternoon. The meeting was organized by the choice of Joseph Torrence, Esq., of Cincinnati, as President; Gen. Childs, of Lexington, Ky., and Capt. E. S. Johnson, of New York, as Vice Presidents; and A. C. Brock, of Middleton, Ohio, as Secretary.

On motion, a committee of three were appointed to draft resolutions, who reported as follows:

Resolved, That we return to the citizens of Chicago our heartfelt and grateful thanks for the whole-souled and cordial hospitalities (unexpected as they were) extended to us upon this occasion, and promise that should an opportunity to reciprocate their kindness ever occur, we will endeavor to show that we are not inapt scholars in the art of courtesy and kindly intercourse.

On motion, the Chicago, Cincinnati, and Dayton papers were respectfully requested to publish the proceedings.

On motion, adjourned.

JOS. TORRENCE, Pres't.

A. C. BROCK, Sec'y.

On the return trip we enjoyed a gorgeous spectacle—the Lake View House, was brilliantly illuminated from cellar to dome; and as we passed, rockets and fire works were being "set off," in unlimited profusion. Mr. H. W. CHESTER, the landlord, is a whole-souled gentleman, and his efforts to please will not soon be forgotten by Cincinnatians.

About ten o'clock we arrived at the docks amid the cheers of a crowd of Chicagoans, and the enlivening strains of the Light Guard Band.

The Committee acquitted themselves nobly in this portion of the programme and received high praise.

The officers of the boat deserve much praise for their attention and courtesy, and we assure them that the same is fully appreciated.

THE EXCURSION TO COTTAGE GROVE.

A large party left the office of the City Railroad Company Friday forenoon at 10½ o'clock. Five cars well filled with passengers comprised the *cortège*. The Excursionists were accompanied by Mr. Bigelow, who explained to those who felt interested in introducing into Cincinnati this mode of city travel, the operations of the road. The party enjoyed a stroll through the grove, visited the new Baptist College, and passed on to the lake shore, and then took to the cars.

THE COMMERCIAL COURTESIES.

At 11 o'clock, the members of the Cincinnati and Dayton Boards of Trade visited the Board of Trade Rooms in that city. The parties were introduced by Julian S. Rumsey, Esq., President, in a speech in which he welcomed the visitors, and remarked on the fact that such meetings as these were calculated to promote good feeling as well as the interests of Commerce. J. Torrence, Esq., President of the Cincinnati Chamber of Commerce, replied in a complimentary speech, in which he eulogized the reception extended to the Cincinnatians, and spoke to the effect that the cities of Chicago and Cincinnati were not rivals, but friends. He was followed by General E. S. Hubbard, of Cincinnati, Wm. Smith, Esq., of the *Cincinnati Price Current*, after which Messrs. J. G. Wright, J. Y. Munn, So-

lomon Sturges and Stephen Clary, were called on and made appropriate speeches.

THE RAILROAD EXCURSIONISTS.

A large proportion of the excursionists availed themselves of the generous offers of the different Northern and Western railroads, and Saturday was quite an animated day at the different railroad termini of the city. Not a few returned home by the Illinois Central Railroad, while quite a number went on to Milwaukee, Madison, Fond du Lac, and other cities.

Above we have given but a brief and very imperfect sketch of the "sayings and doings," that took place on the excursion, our limits forbid more extended remarks. Most of the visitors returned home on Saturday, delighted; nothing having occurred in any way to mar the pleasure of the trip.

LA CROSSE AND MILWAUKEE R. R.—We publish to-day an ADDRESS from N. CLEVELAND, Esq., one of the Presidents of the La Crosse and Milwaukee Railroad, (we believe the Company have as many as three different Boards of Directors, and of course as many Presidents,) it contains as much information, probably, as could be obtained on that side of this triangle question, and we dare say a good deal of truth, at any rate we give it as the last and a very interesting chapter in the history of this road. We may look for a rejoinder next week.

THE SCIENTIFIC AMERICAN.—We have received from the publishers of the above journal a "Supplement," "Circular," and "Prospectus," accompanied with the MODEST request, that we publish the Prospectus! in consideration of which they *generously* propose to send us a copy of their *stupendous* (?) journal for one year free gratis. Now as our terms for publishing the aforesaid Prospectus would amount to about \$10, we fear we shall have to forego the pleasure and *profit* of a "free exchange," with the "largest and cheapest scientific journal in the world!" We shall still have to grope our way in darkness, with no ray of light to illumine our pathway, emanating from that "Central Sun," the "only journal of its class that has ever succeeded."

CHICAGO, IOWA AND NEBRASKA RAILROAD OPENING.—Our invitation to attend the celebration of the opening of another Western extension of our vast system of Railroads, came too late for our acceptance. We understand, however, from an attentive and kind correspondent who *did* attend, that the affair came off to the entire satisfaction of all concerned; and we hope that upon the opening of the West extension of the C. I. & N. R. R., we may be able to attend and participate in the festivities of the occasion. The new road extends from Clinton to Cedar Rapids, 82 miles, and is a continuation of the Galena and Chicago Union Road.

The following is the new Board of Directors of the Cleveland and Toledo Railroad: John B. Waring, A. Stone, Jr., John Gardner, William Durbin, Samuel M. Young, W. Colburu, Henry Kip, M. M. Vermillye, A. N. Ramsdell, Wm. Williams, Dean Richmond, G. T. Oliphant, and T. P. Handy.

THE STREET RAILROAD COMPANY VS. THE CITY.—The jury in this case returned their verdict on Monday, giving the city \$250,000 for the right of way.

J. B. Waring, Esq., has been re-elected President of the Cleveland and Toledo Railroad.

THE CHICAGO, IOWA & NEBRASKA RAILROAD.

The rails upon this road were laid within the limits of the city of Cedar Rapids on Monday last. The prosecution and completion of so great an enterprise, during the terrible financial pressure of the past two years, deserves more than a passing notice at our hands.

The Chicago, Iowa & Nebraska Railroad Company was organized in January of 1856. The line was put under contract as far as Dewitt and work commenced in May of the same year. During the summer of that year the surveys were made, and the road was located to Cedar Rapids, a distance of 82 miles west of the Mississippi river. In October of 1856, the entire line was put under contract, and the work of grading was commenced along the entire line the following month.

The following are the names of the contractors on the different divisions:

- 1st division, W. C. Young.
- 2d " Vanduzer, Houghton & Co.
- 3d " J. D. Mahony & Co.
- 4th " J. H. Ashley.
- 5th " Wolf & Smith.

The first rails were laid on the road at Clinton, early in October, 1856. The road was completed and opened to different stations as follows:

Dewitt 20 miles.....	in June, 1857
Wapsiee 32 miles.....	in October, 1857
Yankee Run 35 miles.....	in January, 1858
London 40 miles.....	in June, 1858
Onion Grove 47 miles.....	in September, 1858
Mechanicsville 58 miles.....	in December, 1858
Lisbon 64 miles.....	in January, 1859
Mt. Vernon 66 miles.....	in April, 1859
Bertram 73 miles.....	in May, 1859
Cedar Rapids 82 miles.....	in June, 1859

The original estimate of the Chief Engineer of the cost of the road was \$1,476,000. The following table shows the actual cost of the road up to the present date:

Engineering.....	\$27,666 33
Right of Way.....	18,051 97
Buildings.....	22,611 90
Bridging.....	15,424 96
Grading.....	212,147 41
Superstructure.....	181,920 30
Iron (about).....	556,019 56
Rolling stock.....	106,670 16
Fencing.....	6,349 86

Total.....\$1,146,861 35

The estimated cost of fully completing the road is as follows:

Right of way.....	\$2,000 00
Completing track.....	20,000 00
Buildings.....	30,000 00
Fencing.....	25,000 00
Rolling stock.....	40,000 00
Engineering, incidentals, etc.....	5,000 00

Total to fully complete and equip the road.....\$122,000 00
Add amount already expended.....1,146,861 35

Total cost of road.....\$1,268,861 35

These figures reveal a fact almost unprecedented in the history of railroads. It is that the road will be fully completed and equipped for a sum less than the original estimate, by *seven thousand one hundred and thirty-eight dollars and sixty-five cents!* This gratifying result is due to the good management, business tact, and economy of Milo Smith, the Chief Engineer and Superintendent.

The rolling stock of the company, consists at the present time of

Locomotives.....	5
Passenger cars.....	3
Baggage cars.....	2
Box freight cars.....	50
Platform cars.....	31
Hand cars.....	10
Rubble cars.....	5
Iron cars.....	2

For the fall business it is estimated the following additional rolling stock will be required:

Locomotives.....	2
Passenger cars.....	1
Baggage cars.....	1
Box freight cars.....	21

The following tables exhibit the earnings of the road up to May, 1859. It should be recollected, not only that the crop of 1858 was almost an entire failure, but also that the road has been constantly occupied by construction trains, and is but just ready to be fully opened for business:

To January 1st, 1856.....	19,630 63
January.....	\$825 05 1,918 50 201 51 2,945 06
February.....	664 75 1,549 01 200 70 2,414 46
March.....	1,233 90 1,759 00 199 78 3,192 68
April.....	1,132 40 2,170 34 210 27 3,513 01
May.....	1,570 31 2,499 76 199 69 4,269 76
June.....	1,382 65 5,698 43 201 42 7,282 50
July.....	1,400 40 4,121 48 234 49 5,756 37
August.....	1,391 91 1,879 16 221 68 3,492 70
September.....	1,784 77 2,401 39 222 79 4,408 85
October.....	1,620 42 1,885 49 256 59 3,662 49
November.....	1,302 74 2,572 42 252 15 4,427 31
December.....	1,170 00 4,162 88 254 06 5,486 94

Total.....	\$15,379 29 32,817 86 2,655 08 50,852 23
1859	
January.....	1,144 02 2,365 62 322 50 3,832 14
February.....	1,272 35 2,402 82 346 42 4,121 59
March.....	1,873 18 2,830 42 361 43 5,065 03
April.....	2,400 71 3,941 95 369 43 6,712 05

Total.....\$6,690 26 11,640 81 1,399 78 19,730 85

The following table exhibits the amount of freight which was carried west on the road up to June 1, 1859. The amount was, up to

lbs. mer-	ft lum-	cords	bbls
ch'dise	ber	posts	lath.
Jan'y 1, 1858.....	1,671,809	1,845,522	00 5,539
Jan'y 1, 1859.....	2,760,399	2,717,688	58 4,936
June 1, 1859.....	2,668,707	1,308,303	44 1,275

Total.....	7,120,855 4,830,913 102 11,900
lbs. aggr	
Jan'y 1, 1858.....	884 16,600 285 88,890
Jan'y 1, 1859.....	1,087 210,150 1,398 130,231
June 1, 1859.....	329 558 1,776 2,000

Total.....2,300 227,308 3,450 221,121

AMOUNT OF FREIGHT CARRIED EAST.

bbls	bu.	bu.	bn.	bu.
flour.	wheat.	oats.	corn.	bailey
Jan'y 1, 1858.....	877 57,805 1,029 32			
Jan'y 1, 1859.....	2,582 207,941 19,111 18,164			1,029
June 1, 1859.....	237 49,146 3,934 22,308			

bu. potatoes.	lbs. sundries.	lbs. prov's.	lbs. por
Jan'y 1, 1858 . 24	100,850		
Jan'y 1, 1859.. 269	329,342	7,673	244,208
June 1, 1859... 30	245,022	57,425	37,306
Total..... 323	675,215	65,098	381,514

	lbs. hides.	No. hogs.	No. cattle.
Jan'y 1, 1859.....	50,196	299	142
June 1, 1859.....	74,891	772	535
Total	125,087	1,071	677

Total.....125,087 1,071 677

Total amount of freight in lbs. West.....12,705,355

" " " " East.....11,042,916

The following statement shows the number of passengers carried over the road:

1857.	East.	West.	Total.
January.....	459	485	841
June.....	573	610	1,173
July.....	1,070	1,104	2,174
August.....	906	1,004	3,174
September.....	1,053	1,053	2,106
October.....	633	619	1,242
November.....	756	726	1,482
December.....	538	554	1,092
Total.....	5,987	6,053	12,022
1858.			
January.....	640	643	1,283
February.....	439	469	908
March.....	827	905	1,732
April.....	693	900	1,593
May.....	1,290	1,415	2,705
June.....	911	946	1,857
July.....	1,177	1,185	2,362
August.....	993	998	1,991
September.....	1,371	1,363	2,734
October.....	1,104	1,051	2,155
November.....	903	810	1,713
December.....	597	582	1,179
Total.....	10,993	11,272	22,265
1859.			
January.....	695	697	1,392
February.....	659	559	1,218
March.....	809	949	1,758
April.....	1,074	1,288	2,362
May.....	1,077	1,188	2,265
Total.....	4,429	4,581	9,010

Total number of passengers passed over the road up to June 1, 1859, 43,267.

The entire expenses of operating the road, do not, at the present time, exceed \$3,000 per month.

The figures we have given,—taken in connection with the small cost of the road, the failure of the crops, the comparative poverty of the country, the general financial pressure, and the unfinished condition of the road, furnish sure promise of a more prosperous future, than is possessed by any other road in the west, with which we are acquainted.

We venture the prediction, that with a good crop this fall, the road will clear from \$20,000 to \$25,000 per month. We shall take occasion, in a future article, to place before our readers the financial state of the company, which, by the way, is in a sound and healthy condition.

We had designed in this article, to mention the names of several gentlemen, to whom, in our opinion, we are most indebted for the completion of the Chicago, Iowa and Nebraska Railroad. But it would be a difficult task.—There are at least a dozen men, without whom the work, at some period of its history, would most surely have been abandoned. The energy, perseverance and good management of Milo Smith, the Chief Engineer and Superintendent, can not, however, be too highly praised. He has accomplished what no other man would, or could have done. We are glad to know that every one who is familiar with the history of the enterprise, is ready to award to him great credit.

The policy and actions of the directors have been bold, liberal, straight forward and untiring. Having pledged themselves to the work, they neither swerved nor hesitated. Several of the directors have individually removed obstacles, which would have frightened more timid men. The Eastern directors have been bold, generous and determined. The Western directors have been zealous, active, and persevering.

For the railroad which Cedar Rapids has today, she is indebted to the union, wealth, and experience of the directors, and the liberal efforts of all the stockholders.—*Cedar Valley Times.*

The different roads centering at Indianapolis have agreed to carry all who desire to attend the grand Fourth of July celebration at that point at half fare.

LA CROSSE AND MILWAUKEE R. R.

Address to the Stockholders of the La Crosse and Milwaukee Railroad Company.

Having been recently elected to the office of President of your Company, by your voluntary suffrages, the peculiar circumstances with which I find myself surrounded, as well as those attending the election, seem to make it incumbent upon me to address you.

I have been connected with the La Crosse and Milwaukee Railroad either as a Banker, Contractor, or Creditor, for the past six years; and I hesitate not to assert, that no one outside of its former directory, and but few in it, know more about its operations and circumstances than myself, from the time of its organization to the present year. Being a *bona fide* creditor and stockholder in the Company, and believing that if the then existing state of things was permitted to continue for twelve months more, there would be nothing left for either creditor or stockholder to realize upon, four weeks ago I went to New York city to confer with the stock and bondholders there, as to the business future of the Company. I gave notice of the purpose of my visit through the press, and when I did so, I was assailed by anonymous communications in the city papers; my motives aspersed and misrepresented in monetary circles, and almost every species of obliquy and detraction visited upon me that the ingenuity of malice of thwarted speculators could devise.

As fast as any of the charges made their appearance in public, I replied to them through the city papers, over my own signature. As soon as it was announced that I was receiving proxies with the view to the election of a new Board, that could not be reached or controlled by Stephen H. Alden, of Albany, New York, the name of Mr. Alexander Mitchell was put up in opposition to mine. When it became known that Mr. Mitchell had been a recipient of the Corruption Bonds, he was partially hauled off for repairs, and the names of Francis Vose and Charles L. Perkins, substituted. In spite of all this opposition, stimulated as it was by whatever Railroad influences this city had in New York, I was conferred with by more than one thousand of the stockholders who had been duped and swindled out of their investments by the former Managers of this Road; and I take this occasion to say, for the information of the Western resident Stockholders, that widespread and distressing as I had reason to believe the misery was which the corrupt and fraudulent mismanagement of this Company had occasioned, yet I had nothing like a correct idea of the extent of the suffering it had caused, until I had the personal conferences to which I allude, with the Stockholders. And I am sincerely of the opinion that except those committed for capital offences, there are but few convicts to be found within the walls of the various Penitentiaries in the Union who have inflicted an equal amount of misery upon the innocent and unprotected, as have some of those who have had this road under their control and direction.

In spite of the opposition made by those who were interested in sustaining the managers of the Company, I was presented by the unfortunate owners with proxies that represented over four million dollars of the Stock.

Upon my arrival in Milwaukee, on Monday, the 23d ult., to attend the election of officers, I found the road had been put through the process of a sham and illegal sale,—(as I am advised by counsel),—by the Trustees of the

Third Mortgage Bondholders, and bid off, without the payment of a dollar in money, by the Trustee aforesaid. A new Company was partially organized, and an attempt made to change the name of the road—the Company's office closed,—and the books, papers and safes belonging to it, taken into the possession of the President of the new organization. This organization had professed to elect the following Directors:

Russell Sage, Ludlow A. Battershal, William Gould, Wm. B. Gilbert, Hans Crocker, L. W. Weeks, N. J. Emmons, Wm. E. Smith, and Wm. R. Sill, and these Directors elected Russell Sage, their President.

When the day of the election came, neither the Inspectors of the Election, or the Stockholders, could gain access to the office of the late Secretary.

At ten o'clock, A. M., the Hon. A. S. Sloan and C. K. Wells, Esq., two of the Inspectors appointed by the Governor, repaired to the office of the former Secretary, to make arrangements for the election, and they found it locked and could not gain admission. At 11 o'clock Chauncy Abbott, Esq., the other Inspector, arrived, and the three Inspectors met at the office of E. H. Goodrich, Superintendent of the road under Selah Chamberlain's lease, and were shown a legal opinion, drawn up and signed by five retained Attorneys, declaring the proposed election illegal, and that the Inspectors had no right to hold it. After listening to a discussion of several hours, between the counsel of the Third Mortgage, and the counsel of the Stockholders, the Inspectors—two of whom rank amongst the best lawyers in the State, and one of whom had just retired, with much credit, from the office of Circuit Judge—decided they had the right to hold the election; thus declaring their opinion of the worthlessness of the pretended sale, and the organization under it. Finding it impossible to gain access to any of the Company's rooms, the Inspectors proceeded to open the polls and hold the election, in the street, in front of the Secretary's office. At this election, the ticket headed by myself, received 27,714 majority. The pretended new company closed up the Secretary's office, against the wishes of those having a right to vote there in the afternoon; and about 15,000 votes were polled for our ticket, on the stoop of the office of the Secretary, and in the open air. Those wishing to vote were then invited into the office of the Horicon Railroad Company, where the election was continued till 10½ o'clock at night, and the following persons chosen Directors:

Newcomb Cleveland, Henry C. Cabell, Cicero Comstock, John Lockwood, Orville Oddie, Frederick H. Stow, Geo. W. Pratt, Albert B. Harris, Tyrus C. Dickinson.

Against this ticket, there were less than six hundred votes cast; and its friends had over twelve thousand votes in reserve, that might have been thrown for it, but for want of time and because it was unnecessary, they were not put in. The following day at the urgent solicitation of outsiders, and against my protestations, the polls were again opened by the Inspectors, and seven votes cast by Daniel Wells, Jr., for the following ticket, which, with the votes received the day before, gave it 539 votes:

Daniel Wells, Jr., Cyrus D. Davis, John Bertschy, B. Ferguson, J. P. McGregor, R. S. Kneeland, and Saml. C. West.

Since the election, I have seen a publication, in the newspapers of this city, which seems to be authorized, stating that Mr. Alexander Mitchell had proxies sent him, for about

30,000 votes, which he did not consider it worth his while to cast, although he was present while the election was progressing.

In New York, proxies were solicited for Mr. Mitchell, by the friends of the former fiscal Agent, Alden, and the late President, Stanton, from the stockholders, on the grounds of his high character and standing, and the strong disposition he felt to aid those non-resident capitalists who had been inveigled into investing in the road, and had been so deeply abused and injured by it, and that he would exert himself to have them realize something from their ruinous investments. On my arrival at Milwaukee, I found Mr. Mitchell one of the most active men in favor of the third mortgage sale and organization—a sale, which, if held good, will annihilate all the interests of every species of stockholders and creditors, except the mortgage and judgment creditors of the road. The scheme was devised by Stephen H. Alden, over eighteen months ago, for that purpose.

With the co-operation of Mr. Mitchell, the hands of Messrs. Cabell, Oddie and myself, (for we four had about all the proxies on the ground,) might have been strengthened, and jointly we would have represented at the election, the votes of eight-tenths of all the shareholders. I allude to this circumstance not for the purpose of passing criticism upon the inconsistency between the professions of those soliciting proxies for Mr. Mitchell, in New York, and his actions here; but to show the non-resident cash stockholders, and the farm-mortgage stockholders in this State, that my representations to them have been verified, and my actions consistent with my professions.

On the 27th of May, an attempt was made by the friends of the late Board and the third mortgage bondholders to get up still another organization. An effort has been made to torture a visit by me, to the room I was informed Mr. Sage, the President of the pretended third mortgage organization was in, to demand of him the books and papers of the Company in his possession, into a recognition of their organization.

The charge that I participated or took any part in, or recognized in any manner, the proceedings of that Board, is untrue. That Board professed to make officers of the names on the ticket, which received 539, out of nearly 30,000 votes cast at the election. Daniel Wells, Jr., was made President, and Samuel C. West, Secretary and Treasurer. The pretence set up for this Board is, that some of the Directors on the ticket with myself were not stockholders at the time of their election. The charge is groundless, for every Director on our ticket was, not only a stockholder at the time of his election, but part of them had been so for years before. But if it were not so, the election of persons who were not stockholders, would render the election voidable only, and not void; and persons so elected and organizing under their election, would constitute a *de facto* Board, which could only be ousted by information in the shape of a *Quo Warranto*. The Board, headed by Daniel Wells, Jr., has, therefore, no rights, whatever.

On the 27th day of May, a card appeared in the Milwaukee *Sentinel*, from N. P. Stanton, late President, etc., claiming that all the elections which had been held were illegal, because they had not been held in the office of the Secretary of the Company! The bare perusal of this card affords ample evidence of the author's own estimation of the falseness of the pretences set up, and the reason given

that the election was void, because it "was unsatisfactory" to the Board, was simply ridiculous. Mr. Stanton and his friends, the third mortgage bond claimants, had the keys of the Company's office, and would not give the inspectors admission; and because they could not gain admission and were compelled to hold the election on the front steps of the office, in a burning sun, therefore the election "was void," and Mr. Stanton and his Board hold over another year! The sequence from the premises stated, I think, will be generally admitted by the stockholders, to be amongst the latest improvements in logical deductions; and to be equalled by only some of the brilliant fiscal feats which have characterized the previous history of this Company.

The best legal advisers assure me, that the election notice was only intended to indicate a locality for holding the election, and the title to the place was immaterial. Conceding that the title had changed, the locality was the same indicated by the notice, and was the only place where an election could have been held.

On the 27th of May, as its President, I instituted proceedings to reclaim the records and seal of the company, and had issued and delivered to the Sheriff of Milwaukee County, the necessary papers for that purpose. The Sheriff took two safes and their contents; and soon after, E. G. Ryan, the counsel of the late Stanton and Alden Board, and of the Sage organization, appeared and presented to the Deputy Sheriff in charge, a pretended withdrawal of the suit, to which was affixed the seal of the Company, and demanded possession of the safes from the Deputy Sheriff. The possession was refused. On Saturday, the Sheriff was required to seize the third safe described in his papers, and about nine o'clock, P. M., he went to the Chamberlain building, so called, for that purpose. When he arrived, Messrs. Ryan and Emmons, Attorneys,—Emmons, the Attorney of Chamberlain, and Ryan, the Attorney of Sage and Stanton—and E. H. Goodrich, Chamberlain's Superintendent, were there; and also about one hundred laborers, consisting mainly of the employees of Chamberlain, and the pretended New Company.—Some of the laborers were armed with clubs and other *persuasive* implements.—The Sheriff took possession of the building and safes, and I left two private watchmen to see that the books were not removed from the safes and building, and spirited away during the night. One of the watchmen, being known as such, was twice ejected from the building, and had to leave.

On the 30th May, the Sheriff delivered up the safes to the new company, they having given an "undertaking," and the Sheriff refused to examine and invoice the contents of the safes! Thus the safes, with their keys and contents, are in the hands of the disputed third mortgage bond organization.

On the 21st of April last, I commenced a suit in the Circuit Court of Columbia Co., charging the old Board of Directors and others with a conspiracy to defraud the stockholders by this third mortgage, and charged collusion between Barnes, the Trustee, and the Stanton-Alden Board. An injunction was issued and served on the 23d of that month, enjoining the sale.

The Trustee then adjourned the sale to the 21st of May, and I went to New York to confer with the non-resident stockholders, and obtain proxies enough to give a different complexion to the new Board of Directors.—While I was East, the old Directors and others implicated who wished to indorse their own

character, piled up affidavits so high that my counsel could not see a way over them, to sustain the injunction, and about the 18th of May, and before my return to Wisconsin, they consented it should be dissolved; but the suit was not discontinued, and is still pending.

The sale took place on the 21st day of May, without any new sufficient advertisement after the dissolution of the injunction. On this account, as well as on several others, I am assured by able counsel that the sale is void.—It may be proper, perhaps, for me to remark here, that within a day or two it has been intimated to me that for the purpose of intimidating and thwarting me in my endeavors to serve your interests, a scheme is on foot to have me arrested for perjury, on account of my swearing to the allegations made in the bill filed by me. The stockholders need have no fears on this account, if such proceedings are instituted, for I can sustain my complaint by three witnesses to every one they can bring against it.

In connection with this subject, it is, perhaps, proper for me to state a fact which has reached my ears, and from which the stockholders can draw their own conclusions:—I am informed by one of the early Directors of this company, that some of the old Directors threatened to place still further obstacles in the way of the sale on the 21st of May; and to appease them, and have the sham sale come off, so great was the anxiety of the members of the Stanton-Alden Board, and the Milwaukee and Minnesota Co., they pretended to quit claim for this Company to Moses Kneeland and James Ludington, the depot grounds donated by Col. Geo. H. Walker, some years ago, to the Company, and situated in the 4th and 5th wards of this city. A previous like transfer of this property, the U. S. District Court recently decided was void, and that the title thereof was held in trust for the stockholders, and creditors.—This property has been estimated to be worth from \$100,000 to \$200,000.

I am informed, by the same authority, that the two companies, in addition to this conveyance, guaranteed to protect Byron Kilbourn, James Ludington, E. H. Goodrich, Edwin Townsend, and Moses Kneeland, from all suits now pending, or that might be brought against them, for any of their conduct or alleged malpractices as Directors of this Company, or for liabilities for omissions of duty as such Directors. Why Jackson Hadley was not included in the indemnity bonds, and furnished with a certificate of character, too, I am not advised. I will not intimate that it may possibly be true that the influence of ex-members of Congress was sufficient to hold such action at bay, until the alleged promised consideration for land grant votes in the House of Representatives, were made good by Mr. Hadley. But whether it was or not, the stockholders will understand, if this information be true,—and I have every confidence in it,—that the Stanton-Alden board, and the third mortgage, or the Sage-Alden-Chamberlain organization, have shown their zeal for the interests of the farm mortgage and other stockholders in a very equivocal way by granting absolution to five of the wealthiest and most active and censurable members of the old Board of Directors.

When N. P. Stanton was elected President of this Company, he made the streets of Milwaukee vocal with his protestations that those Directors who had wasted the substance of the Company, and got unjustly wealthy out of it, should be prosecuted, and their ill-gotten gains reclaimed for the stockholders. To this end, it was represented the services of E. G. Ryan,

Esq., had been secured—circulars were sent to the corruption bondholders by Mr. Guest, Vice President, demanding their return—and the names of even the directors were given who were present and voted to issue the corruption bonds proper, as well as those which were known as the "Barstow corruption bonds," and who had received the Company's bonds without proper authority or consideration, and were liable for the consequences of their votes, to the stockholders.

Those who originated, and under whose auspices the Stanton board was organized, and those who knew the interest Stephen H. Alden had in discouraging prosecutions to recover monies or property fraudulently obtained from the Company, will not be at a loss to conjecture why all the threats and promises of President Stanton, and directors Smith and McGregor, and the street-vaporings of Attorney Ryan, ended as they began, in a barren display of words. The Governor of this State was severely censured publicly and privately, by Stanton and his interested friends, because he would not transfer to the Company the land they claimed for building the sixty miles offroad west of Portage City, and thus, as they averred, furnish them with material aid to carry out their professed intentions of prosecuting and punishing those who had been doing injustice to the Company. Within one year from the time these professions are made, Mr. Stanton is found making earnest endeavors to have the Company pass into the hands of the owners of the third mortgage, and thus not only extinguish the interest of the stockholders and most of the creditors of the road, but, establish, as their lawyers contend, a *Lethe*, that is to wash the former managers clean in reputation, and remove all pecuniary liabilities for past misdeeds.

I submit to your judgment whether the exigency that would change the professed line of Mr. Stanton's policy from good to bad, so suddenly and flagrantly, does not carry with it, its own comment, and spare me the necessity of wasting words upon it? Do fair and legitimate business transactions require such transparent concessions to gross wrongs?

When the Third Mortgage-Holders came to foreclose this mortgage, by which all the property and rights of the corporation and of the stockholders were to be swept away (as they assumed,) they employed E. G. Ryan, Esq., the Attorney of Stanton and the Company, to conduct the proceedings against the Company. The unconstitutional law by which the contract of the Company was to be nullified, and the rights of creditors and stockholders were to be sacrificed, was, as I have been informed and believe, concocted by the advice and approval of the old Board of Directors, and carried into effect by the aid of the Attorney of the Company colluding with the Trustees and Bondholders under the Third Mortgage. More conclusive proof of the corrupt character of this mortgage and the knavish purposes to which it was intended to be applied, could not be furnished even if one of the parties concerned were to testify against himself.

I have thus endeavored to give you a concise summary of the events, touching this Company which have transpired within the last sixty days. Not having access at this time to the books of the Company, I am not able to give you any detailed statement of the precise condition of its affairs. I have had prepared by an experienced accountant the annexed analysis of the three last reports of this Company, to which I wish to call the particular attention of the stockholders and the public at large. If the three consecutive annual reports of any other Railroad Company on earth can furnish a

parallel to the following, I should like to have them produced:

ANALYSIS OF THE REPORTS OF THE LA CROSSE AND MILWAUKEE RAILROAD COMPANY.

FOR	1857.	1858.	March 25, 1859.
Capital stock.....	\$2,031,200	\$6,555,574	\$10,872,000
City Milwaukee.....	314,000	314,000	319,000
1st mortgage E. div....	942,500	921,000	903,000
2d " " " " " " " "		1,000,000	1,000,000
Farm m. bonds.....	913,500	1,108,400 inc in stock.	
3d m. bonds.....			2,000,000
Con. 5 year bonds.....	107,000	107,000	107,000
Consolidation bonds....	35,800	210,000	210,000
1st mortgage land grants..		2,500,000	
2d " " " " " " " "		253,600	4,367,500
Construction of 1862....		704,000	704,000
" " " " " " " "		764,000	764,000
Interest scrip.....		33,566	33,566
Real estate bonds.....		6,000	6,000
S Chamberlain's judgt..		629,190	787,587
N Cleveland's " " " "		114,000	136,000
Floating delts.....	68,607	660,478	75,000

Total..... \$4,412,607 \$15,980,708 \$22,282,653
Increase in 1858, \$11,568,101; increase in 1859, \$6,301,945. Total increase in two years, \$17,870,046!!!

Bad as this showing is—and the condition of the Company is no doubt full as bad as it is represented to be in the reports—I am of the opinion that something may yet be saved for the stockholders, if what there is left of the insolvent skeleton, is properly husbanded, and some of the pretended, but fraudulent liabilities cut off. From the light now before me, I shall advise the Company to contest and have set aside:

1st. The two millions of third mortgage bonds under which the foreclosure has taken place, and which I have already charged in a bill in chancery as being fraudulently issued and for which I have reasons for believing the Company has never realized five cents on the dollar.

2d. The one million of bonds issued to bribe public officers and lobby-men, known as *Corruption Bonds*.

3d. The one million of bonds of a like character to the above, and issued for like purposes, known as the *Barstow Bonds*.

4th. The one million of bonds called the *Second Mortgage Bonds*, on the Eastern Division of the road.

5th. The second issue of Land Grant Bonds amounting to \$1,500,000.

6th. The issue of \$395,000 on the Second Land Grant Mortgage.

7th. The judgment of Selah Chamberlain, amounting to over \$700,000, and his lease, which is a damage to the interest of the stockholders still more than the amount of the judgment.

8th. And the prosecution and setting aside of all other fraudulent or dishonest liabilities, which I shall discover on getting the books and papers of the Company in my possession.

To carry out these and other reformatory measures, that a further and more minute investigation into the affairs of the Company may develop the need of, I shall require and hope to receive the countenance and co-operation of the stockholders. In my own behalf, I pledge my most earnest endeavors, and whatever of energy, means or character I may possess, toward bringing order out of the almost hopeless chaos into which the affairs of the Company seems involved.

My efforts to make a change in the direction and management of this Company, have met with a bitter and formidable opposition, both in this city and New York, from Railroad speculators and their employees and dependents. In this city the pretended boards headed by Stanton, Wells, and Sage, and the organization of Chamberlain, the lessee, exhibit a unity of action and oneness of purpose which indicates with sufficient distinctness, that the old firm of Chamberlain and Alden, with the addition of Sage, Wells, and others, are at the bottom of the scheme or schemes now in vogue. Precise-

ly what all their schemes are, I am not advised; but I am told of one which I deem it my duty to caution the stockholders against. It is that of allowing this road, after it shall have been legally sold on this third mortgage to be consolidated with, or pass into the hands of the Milwaukee and Mississippi, and the Milwaukee and Watertown, and the Watertown and Madison roads.

The LaCrosse road forms the main trunk line of Wisconsin, and passes over a route which possesses twice the strength of any other Railroad route in the State. Deplorably as it has been managed and abused, it has not, in my judgment, become reduced to that low condition yet, that it need entirely destroy its innocent stockholders, whose means gave it being, and whose returns thus far have been most scanty and inadequate. I think there is yet sufficient of the road, if properly husbanded, to have it pay its honest debts and make its stock, in some degree remunerative. But it has been too much impoverished by plunder to enable it to shoulder and carry along two other roads, that abuse have made equally poor, and which are naturally not half as valuable. If the three Railroads should pass into the hands of one set of owners, it would destroy them as competing lines—place them all on a level—and thus deprive this road of its superior advantages over all others. Besides, if these roads should all pass into the same hands, and be controlled by the same owners, it would establish a huge and odious monopoly in the State, in the hands of a few unprincipled speculators, sufficient to rival the sovereign power of the State itself; overawe legislatures, courts and governors; and control elections and perpetuate the social and political corruption, which has made the name of Wisconsin a by-word in all lands. It would also cause an increase in the tariff of rates for both passengers and freight—that is now already too high—cripple the commerce of Milwaukee and the business of the interior towns, and perhaps force a considerable share of the carrying trade of the Upper Mississippi over the Illinois roads from Dunleith or Fulton to Chicago.

The prominent men in the Sage organization are the principal managers of the Milwaukee and Mississippi road—a road that is running more for the benefit of Illinois and Chicago today, than it is for Wisconsin and Milwaukee—though I am told it is under the control of Milwaukee men, and its construction was aided by Milwaukee capital and Milwaukee city credit.

There is another project which the Sage, Chamberlain-Alden organization is endeavoring to enforce, that will meet with the unqualified opposition of the regular Company, and that is the change of its name to the Milwaukee and Minnesota Railroad Company. I can not perceive how a change of name will relieve the Company from any portion of the odium which its past mis-management has caused to attach to it. It would be a felon's Dodge only, so far as the Company is concerned, and in view of its past management, perhaps not inappropriately; but there is an implied disrespect and slur upon La Crosse City and County in it that is undeserved. I am told that the project of this road originated with a distinguished citizen of La Crosse, the late lamented Gov. Burns—that the city has ever been the fast friend of the Company—and that its friendship has been repaid only with an inconvenient location of its depot, in order to aid some directors in a rival town-lot speculation in what was known as North La Crosse, and in a town on the Minnesota side of the Mississippi, known as La Crescent. It seems to me that La Crosse, and not the Company, is the party that has had reason to complain of the use and abuse both of its name and its local interests.

In conclusion, I beg to address a few plain

words to the citizens of Milwaukee:—You have the finest site for a city on the western shore of Lake Michigan; you have the best bay and harbor, and the shortest route to the Mississippi to be found on the westerly side of the Lake. In twenty-two years your city has grown till it is said to be one of about 60,000 inhabitants. It has three Railroads running from it into the interior, and two of them to the western limits of the State. In aid of these roads it has involved itself to the large amount of about one and a-half millions of dollars. These three roads have been built and put in operation by Milwaukee men, and controlled by Milwaukee influences. They should have been built, equipped and put in good running order for about \$18,000 per mile. They have cost from \$35,000 to \$90,000 per mile. Where has this immense margin gone? *Who has got it?*

About 30,000, or one-half the inhabitants of Milwaukee are industrious, frugal, debt-paying Germans. With one or two ignoble exceptions, none of this large class of your fellow-citizens have been implicated in the Railroad mis-management and frauds which have so deeply injured the reputation of your city. Of the other half of the inhabitants, full 10,000 are represented to be foreign born citizens, of Irish, English, French, Swiss, and Norwegian origin. To their credit be it spoken, with but one exception, none of them are named as being responsible for the results of your ruinous Railroad policy. The remaining two-sixths, or 20,000 inhabitants, is said to be about the number of Americans in the city. Of these, the laborers, mechanics, manufacturers, and merchants, have had but little to do with Railroads except to vote loans to them and pay taxes to keep down the interest on the securities loaned. These several classes comprise, with less than fifty exceptions, all the native-born American inhabitants of this city. It is to the mis-management and indiscretion of these less than fifty persons, which I have not enumerated, and who figure most conspicuously around your fashionable resorts, and in your public enterprises, that you are indebted for the abuse of trust-funds and the bad credit in which your city and its Railroads have fallen. They are to be found around your Banks, Insurance Companies, Law Offices, and other places where schemes are devised to draw money, in the easiest manner possible, from the hand of productive industry.

They aspire to be your "leading citizens," and under their lead, I think you all will admit, you have been led into serious difficulties. They have their bickerings and quarrels among themselves, but when a great scheme offers like the land grants, or the third mortgage foreclosure, or the consolidation of all your principal roads to be run and governed by themselves, they are a unit and work harmoniously together. Their "style" is to buy when they can not coax, flatter, or bluff their projects through; and bribing your public officers, they roseately describe as "propitiating them with pecuniary compliments." The 6,000 farmers who have imperilled their homesteads in Railroads under these men's control, and the non-resident capitalists who have loaned or invested over ten millions of dollars in your roads, have had enough of their management, and would like to see something in return that bears the color of their money. Would not your tax payers also like to be relieved from being annually taxed to pay the interest upon, and by and by the principal of, the city bonds which have been entrusted to these men to aid the public works under their control. Are not the requirements of the farm mortgages, and the non-resident cash stockholders to realize something from the large amounts they have risked, both just and reasonable?

There is not a Railroad leading out of this city which ought not to pay a rich dividend

upon its honest and legitimate cost. But they all pay nothing, or next to nothing, to the stockholders. Why? Because the entire amount of the necessary capital to construct and equip them, has been stolen or squandered by the managers who had them in charge. In the case of this Company, more than three times the amount necessary to construct and equip the road has been sunk to the stockholders. To those of you who have witnessed the sudden manner in which vast fortunes have been acquired by those who have figured prominently in your Railroads—while the roads themselves have been stricken with bankruptcy—I presume it will be no mystery why past transactions are desired to be buried in third mortgage foreclosures. Retribution and restitution are sometimes unpleasant visitors.

I have thus deemed it my duty to partially point to the source of the principal opposition to the present management of this company; and to indicate the motives that stimulates it.

For four years I have been engaged in a contest with the former managers of this road, to get from them the earnings of my life that were locked up in the road, and which they did their utmost to retain. I succeeded; and in the controversy gained much experience, that will be useful in conducting a contest for the benefit of the creditors and stockholders. The plunderers of this Company are aware of this, and they will doubtless continue to make up in calumny and detraction, what their position lacks in merit. It is not my intention to be annoyed or frightened from my purpose of protecting the best interests of the Company, by any side issues that may be sprung upon me.

I shall, at all times, be happy to meet and confer with any of the farm mortgage or cash stockholders, and creditors, as to the present and future position and prospects of the Company, at my room at the Newhall House, or at the office of the Secretary.

N. CLEVELAND, Pres't.

La Crosse & Milwaukee R. R. Co.

Milwaukee, June 6, 1859.

STRAIGHT LINE RAILROAD.

We have the last Annual Report of the Straight Line Railroad to the stockholders, containing an exposition of the present condition of its affairs and the future prospects of the enterprise. The Directors express a confident opinion that the decision of the Circuit Court in the case of the Road against the city of Evansville will be reversed in the Supreme Court, and that the company will finally recover from the city the amount of bonds and interest, which now exceed over \$130,000.

The company has been unable to obtain any settlement with the contractors, Messrs. Willard, Carpenter & Co. After exhausting all their efforts to procure a just and amicable settlement—and offering to refer the matter—according to the provisions of the contract—to arbitration—the company have been compelled to resort to a suit, which is now pending, to compel a settlement of the contractors' accounts. In the account filed in court against the contractors, the company charges them with—

Bonds, cash, and assets of various kinds to the amount of.....	\$699,572
And credits them with work done according to the contract to the amount of.....	296,713
Leaving a balance of.....	\$402,859

This account may be slightly varied by proof on trial, but it is sufficiently accurate, the report says, to show the amount justly due from the contractors. In estimating the present assets and property of the company, the President presents the following exhibit:

Roadway and work done on it.....	\$500,000
Assets in W. Carpenter & Co.'s hands.....	225,000
Due from the City of Evansville.....	130,000
Due from other subscribers.....	75,000
Land not mortgaged or sold.....	8,000

Total of assets and property.....\$938,000

Insidious efforts have been made to break up and dissolve the company by certain parties who have an eye upon these assets, with a design of embezzling and destroying them, in the general wreck of the Company's affairs which would follow a dissolution. This amount is too large, says the President, to suffer to be lost. It may, when the affairs of the company shall be again put in order, and in more propitious times, prove the basis of a new and successful enterprise to complete the road.

The efforts to break up the company have been very active and persevering, and the design was to have been accomplished by its originators at the last election, by choosing a Board of Directors who would discontinue the suit against the contractors, and allow them to hold on to what they had got, and in the general scramble of "save who can," other parties would run off with what might remain. The delinquent subscribers for stock had been persuaded that they could thus avoid the payment of their notes. Those who had conveyed land were told that it should be recovered for them, if they would join in the movement. More than a hundred stockholders were induced to sign a paper like the following, which we extract from the report:

"Whereas, An illegal association of persons claiming to be a corporation, duly organized under the laws of the State of Indiana, under the name of the Evansville, Indianapolis and Cleveland Straight Line Railroad Co., claim to hold a debt against me, evidences by a promissory note, for about \$——, which is fraudulent and unjust; Now I have this day employed John P. Usher, Harvey D. Scott, John N. Evans, and Newton Booth, attorneys at law, to prosecute and defend all suits necessary to defeat said claim; and should said attorneys succeed in holding me clear, free and harmless from said note, or render it impossible for said Railroad Company, or their assigns, to recover the same from me, I obligate myself to pay said Attorneys, without relief from valuation or appraisal laws, the sum of \$——."

A similar paper, authorizing the same parties to sue for and recover the land that had been conveyed to the railroad for stock, and agreeing to give one-half the quantity recovered to the Attorneys for their services was executed. To these latter papers were attached a power of attorney, authorizing one of the gentlemen to vote for the parties at all election of officers and in the transaction of other business at the stockholders' meetings. Over one hundred stockholders had been beguiled into the plot, and armed with these proxies to vote, the design of the contractors was to elect a Board of Directors composed of their own creatures, who would allow them to carry on their suits in their own way—dissolve the company—and make a final division of the spoils among the schemers. The President says these measures were fortunately defeated, and a Board elected, who are determined to preserve the coporation, secure its assets, adjust its accounts, enforce its claims, and finally relieve it from all its difficulties. When this is accomplished, stockholders may decide whether they will carry the original enterprise through, or transfer the property and franchises to new corporators for what they shall then be worth.

Full confidence is expressed in the final

completion of the road, which, in the opinion of the Directors, is only a question of time; and they appeal, with earnestness, to the stockholders to sustain the present Directory in their efforts to bring order out of the chaos in which the company's affairs have been involved, by mismanagement and unscrupulous betrayal of trusts on the part of contractors. They also warn their constituents against the insidious designs of men who would lead them to strand the ship in which they are embarked, with the design of plundering the wreck after the disaster.—*Evansville Journal*.

COAL BURNING ON THE BOSTON & PROVIDENCE RAILROAD.

Below we give a table showing the amount of coal consumed and the miles run by fifteen locomotives on the Boston and Providence Road for the six months ending May 31st, 1859. The freight and passenger service is kept distinct, and the averages stated in each. The engine Washington, running the largest amount of miles, has used the smallest amount of coal per mile. We print the tabular statement as follows:

Total.	Names of Locomotives.	PASSENGER TRAINS.			FREIGHT TRAINS.		
		Lbs. of Coal.	Miles run.	Pounds per mile.	Lbs. of Coal.	Miles.	Pounds per mile.
140,018	New York.....	97,850	8,611	32.3	51,330	1,295	39.6
50,401	Lexington.....	35,880	898	42.7	12,045	37.7	37.7
	King Philip.....	29,218	10,980	25.7	40,338	37.7	37.7
	Washington.....	17,970	6,607	25.9	9,380	43.2	43.2
	Tarheone.....	102,256	7,213	29.6	1,698	44	39.6
	Rhode Island.....	172,924	8,447	29.6	2,2510	3,474	38.8
	Camden.....	166,748	6,803	29.1	...	...	...
	W. R. Lee.....	129,043	3,351	38.8	...	...	...
	Neposset.....	40,530	1,257	32.3	...	...	...
	Providence.....	14,330	364	39.4	...	...	...
	Bristol.....	14,330	364	39.4	...	...	...
	Mississippi.....	14,330	364	39.4	...	...	...
	Iron Horse.....	47,800	1,567	30.7	...	...	...
	Altamont.....	...	...	...	11,440	508	39.6

Average.		32.9			38.8		

The average coal used per mile for both passenger and freight engines is 32.9 pounds, or about ten miles per ton. The average cost per mile is 8.57 cents. The coal costs on the tender, all expenses included, \$5.84 per ton of 2,240 pounds. The whole number of pounds of coal used is 2,597,270, or 1,159½ tons, and the aggregate miles run by both passenger and freight trains, was 78,995. The fuel expenses per mile run on this road have been reduced within a few years, about 67 per cent, according to the above statement. This shows what can be done by an intelligent adoption of the means to the end. Some of our friends in other sections of the country who are rather apt to underrate the efforts of New England managers, can take a lesson from the above statement. The Boston and Providence Road is well managed in every department both with an eye to economy and to the comfort of the public. We are glad to hear that they lately put up the necessary tanks for kyanizing their cross ties. This we regard as an economical movement of a permanent character.—*Am. R. R. Times*.

BOSTON, CONCORD AND MONTREAL R. R.—At the annual meeting of this Railroad Company, held at Laconia, N. H., May 30, 1859, the old Board of Directors was chosen to serve for the ensuing year, viz:

Josiah Quincy, John T. Coffin, John E. Lyon, H. Hinkley, A. H. Tilton, John L. Rix, and John P. Putnam. The gross traffic operations for the year ending March 31, 1859, compare with the previous year as follows:

	1858-9.	1857-8.
Total earnings.....	\$247,720 66	\$235,805 36
Working expenditures.....	141,381 61	134,737 84
Net earnings.....	\$86,338 45	\$101,067 52
Net decrease for the year.....	\$14,729 07	

ILLINOIS SOUTHERN R. R.

We learn that the Railroad meeting at Mt Carmel last week, was quite a spirited affair, being largely attended by the citizens of Wabash county, and that the counties of Lawrence, in this State, and of Knox, in Indiana, were well represented also.

Judge Ellis, of Vincennes, addressed the meeting, and stated that the citizens of Knox county would subscribe \$75,000, provided the road should cross at the Grand Rapids, and thence to Vincennes on the Indiana side.

Judge McLean, of Lawrence county, made known what steps had been taken towards securing the construction through its limits, and stated that \$20,000 would be raised for that purpose.

A number of resolutions were adopted, taking the very truthful ground that the road was one of the most important, necessary and feasible enterprises of the day.

Under the circumstances, the Board of Directors pursued the only sensible course in their power. After a full and lengthy consultation on all matters and propositions relative to the direction the road should take from Mt. Carmel to a point on the O. & M. R. R., they agreed to meet in Vincennes on the 23d inst., and then and there positively and definitely determine the terminus of the road. This will give Vincennes and Lawrenceville a chance to see what each can do in the way of raising means towards securing the object had in view by each party.

Knox county can well afford to raise a large amount,—in fact, build the entire road from the crossing of the Wabash to Vincennes, as the levee, or embankment, that would have to be built, averaging about three and a half feet, would be the means of entirely reclaiming about 143,000 acres of the best of land, the produce of which would, in a very short time, be all sufficient to cover the whole expense.

On the other hand the \$20,000 of Lawrence county will, perhaps, be about as much, considering the difference in expense of construction on the two routes, as the \$75,000 of Knox county.

Both parties will now have to work with a will up to the 23d inst. and be able to show their best cards to the Board. We believe the Board will be alone governed in their location of the terminus, by their conviction of the best interests of the road both now and for the future, and we sincerely hope that let their decision eventuate as it may, both parties—for both parties will be benefitted in any event—will exert themselves to procure the means to insure the immediate completion of the road bed, and cheerfully coöperate with the Directory in bringing forward a work that will mark an era in our whole section of country.

THE CITY RAILROAD BOND SUIT DECIDED.—The great suit of Graham and others, against the city of Maysville, to compel the payment of interest due on Railroad Bonds issued by the city, was, we learn by a Telegraphic dispatch decided in the Court of Appeals at Frankfort, on yesterday, against the city, by the Court awarding a Mandamus as asked for by the plaintiffs.

This terminates all litigation on the subject we presume, and the only thing to be done now, is either to pay the interest on the debt punctually, or in some manner compromise the matter so as to release our people from the heavy burden which it fastens upon them.

What effect it will have upon the business and prosperity of the city, is of course yet to be developed, but we earnestly hope that our people will stand up as they have done heretofore with brave hearts, and determine that they will carry through their difficulties in a manner that will not leave a blot on the fair fame which Maysville has so long maintained. For a year past our city has been in an exceedingly prosperous condition, and she has seemed to be moving onward in her career of healthful increase in population and business, with more rapid strides than ever before. We hope that this will not be checked now, but that she will still go on in spite of difficulties that beset her, and ultimately overcome all, and place herself with an unsullied credit beyond every obstacle.—*Maysville Eagle*.

EXCITING RACE.—STAKES \$275,000.—From L. D. Buckner, Superintendent of the Cleveland and Toledo Railroad, *The Cleveland Leader* obtains the following particulars of an exciting race in which the steeds were iron horses and the stakes greater than have ever been known on any track. Mr. Buckner had the facts from John D. Campbell, Esq., Superintendent of the Michigan Southern and Northern Indiana Railroad. One day last week, as the eastward-bound Express train reached Laporte, Ind., a passenger stepped off while the engine was being replenished with wood and water, and walked back and forth on the platform, and continued to walk until the whistle sounded. The other passengers got on board and the train passed off, but the gentleman still walked on. A few minutes after the train had gone, a station man saw the pedestrian, and going up to him, asked in a surprised tone—

"What the — are you doing here?"

The man started, opened his eyes, and looked around bewildered. The fact was, he had been fatigued and dropped to sleep while walking. Rousing himself, he asked—

"Why! Where am I!"

"Where are you? At Laporte."

"Where's the train I came on?"

"That left ten minutes ago."

"Ten minutes ago and left me! I must go on that train. It is a question of life and death with me. Can you get me to it? Have you got an engine here? Where is the Superintendent?"

The section master had an office near by, and the two went to find that official and to procure an engine. The traveler stated his case—he must go on—could not delay—and offered the officer \$250 if he would put him on board the train. This strange demand and strange offer caused the station master to hasten to do what he could. The fire was not out in the engine that had drawn the train to that point; the bargain was settled; a draft given on New York for the \$250, and in ten minutes the traveler started with an engine to

overtake the flying Express. After rushing on for thirty or forty miles some connection gave way about the engine. The engine was stopped—the engineer found the difficulty, and in a very few minutes had a wooden pin whittled out and fitted to supply the deficiency. With this, on they flew. The train had of course many miles the start of them, and despite the wooden pin the engineer crowded on steam and tore through the country at a fearful rate. Thirty miles of the distance passed was run in *twenty-seven minutes*, but the engagement was that they should overtake the train, and do it they must, and do it they did, but not until more than 100 miles had been run, and they were approaching Toledo. Having at length overtaken and stopped the train and hurried on board, the traveler went eagerly to a berth in the sleeping-car, and took therefrom a carpet bag containing \$275,000. His treasure was safe—none had molested it, and, dismissing his faithful courier, he went on his way rejoicing at the success of his perilous and exciting adventure.

GREAT DISPATCH IN BUILDING HORSE RAILROADS IN ST. LOUIS.—A new era of prosperity, in a pecuniary point of view—coupled with great convenience to our citizens—is about to dawn on our city by the establishment of Street Railroads. It has been thought, by many of our citizens, that the actual building of Horse Railroads through our streets, was "all talk and no cider,"—to use the common slang applicable to many new projects; but we are happy to say this is *not* the case with the projected Street Railroads of St. Louis. Already the city government has granted charters to *three* companies to construct railways through our streets, and their charters have fallen into hands who have the ability and disposition to finish them, without any unnecessary delay.

But, "Will they actually be built?" asks one, and "When?" asks another. They will all be built, and with reference to the time, we can speak for *one* of them, and doubtless we could speak for all, if our information were complete. We allude to the Olive Street Horse Railway; and marvelous as it may seem, we have the best authority for saying the projectors contemplate having it ready for the cars, and the cars (16) running on it by the *fifth day of July, 1859*—only four weeks from to-day; that is, it will be laid and in running order by that time, if the contractors for the iron rails and the cars come up to contract time.

We learn that the rails are to be finished by Monday next, and that the cars (16) have been purchased and are expected here by the latter part of next week.

The cross ties and sills will be ready in ten days. The blocks for paving will also be ready, and with five hundred men at work, on different sections, the road can and will be built in fifteen days—working time! The Olive Street Road is to be constructed with "turn outs"—so we learn—and thus made, the cars can go up and down the same rail. The stock of this road (Olive Street and Market Street,) is all taken—\$125,000—and is in the hands of but seven shareholders, five of them among our most enterprising citizens, and two Philadelphia gentlemen of ample means. The President, Erastus Wells, Esq., is a man of energy, and will have the cars running in four short weeks from this date. That he will do it, we do not doubt, if, as we before remarked, the iron rails and the cars shall be forthcoming in contract time. We are glad to learn, in this connection, that the

managers of this railroad obtain the rails *here*, thus giving, as all ought to do, encouragement to our home manufacturing interests.—*St. Louis Democrat, of Thursday.*

THE FIRST GALVANO-ELECTRIC TELEGRAPH.—It was the Russian Baron Schilling who, at Munich, so long ago as 1816, had invited the Honorable Frederick James Lamb, then British Envoy and Minister Plenipotentiary to the Court of Bavaria, to accompany him to Dr. Samuel Soemmerring, in order that he might see his telegraph, the first ever made to act by a galvanic battery. Schilling have introduced the British Minister to Soemmerring on the 2d of July, of the year mentioned (1816,) repeated the visit with him ten days later, the 12th of July, when the telegraph was made to operate before them. Besides the brother of Lady Palmerston and the Russian Baron Schilling, there were on that occasion present also, the Countess Banfy, Schilling's sister and her husband Count Banfy, from Vienna, then on a visit at Munich. Dr. Hamel proves that the date of Soemmerring's invention is no where accurately stated. His first telegraphic apparatus was made between the 9th of July and 6th of August, 1809. Baron Schilling, who was at that time attached to the Russian mission at Munich, saw it for the first time on the 13th of August, 1810, and from that day he became an enthusiastic laborer in the field of electric telegraphy. In the autumn of 1812, he was enabled, by means of a subaqueous conductor, planned by him in April and May, at Munich, to explode powder mines across the river Neva near St. Petersburg. Subsequently he made the very first electro-magnetic telegraph, a copy of which, in 1836, found its way through Bonn and Heidelberg to London. In 1837 there was at St. Petersburg a submarine cable making for him, with which he intended to unite Constadt with the capital, through the Finnish Gulf. His death, which took place on the 7th August, prevented the execution of this early submarine telegraph enterprise.—*London Journal of the Society of Arts.*

Bricks that will float used to be made years ago, but the art has been lost until recently. A Monsieur Fabroni has, it is said, discovered their composition, which is said to be five parts of silicious earth, fifteen of magnesia, fourteen of water, twelve of alumina, three of lime, and one of iron. They are infusible, and will float in water, though one twentieth part of common clay be added to them. They resist water, unite perfectly with lime, and are subject to no change from heat or cold. They are nearly as strong as common brick, though only about one-sixth as heavy, or considerably lighter than water. They are such poor conductors of heat, that one end may be heated red hot, while the other is held in the hand.

IMPORTANT DECISION.—The Ohio and Mississippi Railroad Company recently brought suit against William M. McPherson, of this City, to enforce payment of the stock subscribed by him, a portion of which he paid and declined to pay the balance. In answer to the petition of plaintiff, he set up that there was "no corporation."—The Ohio and Mississippi Railroad Company. This was the chief point of the answer, and the argument to sustain went on the ground that a corporation created by the laws of one State can not organize and do business as a corporation in another State; that all such acts are null and void, etc. The Ohio and Mississippi Railroad Company having held the first meetings, elected directors, and done other corporate acts in Missouri, had acted illegally, and the acts so performed were without authority and law. As a consequence, calls for stock made by directors thus illegally elected, were invalid, and could not be enforced. This was the substance of the argument, elaborated at some length by counsel for the defense. The case was argued for the cor-

poration by S. T. Glover and William Holmes, and for Mr. McPherson by J. R. Shipley, before Judge Lackland, of the Circuit Court of St. Louis, city and county, who, a day or two since, rendered his decision and judgment against the defendant for the sum of \$1,642.

The important principle involved in the suit entitles it to attention. The defendant, it is understood, will ask for a review of the above decision by the Supreme Court of the State, when any doubts which may be entertained of the law pertaining to this subject will be finally settled.—*St. Louis Republican, 18th inst.*

MONETARY AND COMMERCIAL.

The slightly increased stringency in money matters spoken of last week, can scarcely be said to have decreased, and the change, if any, is so slight, as hardly to be perceptible. The demand for money was quite large yesterday, but the supply was fully equal to the demand, and all parties presenting good paper have been accommodated. Sixty day bills are taken at 9 to 9 per cent, and for local paper the range is from 9 to 12 per cent, according to quality. The demand for Gold is limited.

For Eastern Exchange there has been a good demand, and some bankers have paid 65 cents.

The rates for exchange continue as follows:

	BUYING.	SELLING.
New York Sight.....	@ $\frac{1}{2}$ prem.	@ $\frac{1}{2}$ prem.
Philadelphia.....	$\frac{1}{2}$ prem.	@ $\frac{1}{2}$ prem.
Baltimore.....	$\frac{1}{2}$ prem.	@ $\frac{1}{2}$ prem.
Boston.....	$\frac{1}{2}$ prem.	@ $\frac{1}{2}$ prem.
New Orleans.....	$\frac{1}{2}$ dis.	$\frac{1}{2}$ dis. par.
American Gold.....	40@50 prem.	@ $\frac{1}{2}$ prem.

SALES AT THE NEW YORK STOCK BOARD.—JUNE 21.

\$4,000 United States 5's, 1874.....	104
\$10,000 Missouri State 6's.....	86 $\frac{1}{2}$
8,000 do.....	86 $\frac{1}{2}$
5,000 do.....	86 $\frac{1}{2}$
5,000 do.....	86
5,000 do.....	86 $\frac{1}{2}$
5,000 Virginia 6's.....	90 $\frac{1}{2}$
4,000 Erie R. R. 2d Mt. Bonds.....	75
500 Ills. Cent. R. R. Bds.....	83 $\frac{1}{2}$
4,000 Tenn. 6's, '90.....	92 $\frac{1}{2}$
175 Shares Pacific Mail S. S. Co.....	70
5 " Del. & Hudson Canal Co.....	91 $\frac{1}{2}$
1050 Shares N. Y. Central R. R.....	73 $\frac{1}{2}$
110 " Erie R. R.....	63 $\frac{1}{2}$
150 " Hud. River R. R.....	31 $\frac{1}{2}$
50 " Harlem R. R. Pref.....	25 $\frac{1}{2}$
300 " Reading R. R.....	41 $\frac{1}{2}$
1200 " Mich. S. & N. Ia. G. S.....	30
200 " Panama R. R.....	123
50 " Illinois Cent. R. R.....	53 $\frac{1}{2}$
5 " Gal. & Chicago R. R.....	64
100 " Clev. R. Toledo R. R.....	26 $\frac{1}{2}$
100 " Chicago & Rock Island R. R.....	59

The New York Tribune of the 21st, says:

The bids for the \$5,000,000 new Treasury bills opened at Washington to-day were found to be almost wholly from this city. The awards were \$100,000 at 5 per cent; \$800,000 at 5 $\frac{1}{2}$ per cent; \$1,800,000 at 5 $\frac{3}{4}$ per cent, and \$2,300,000 at 6 per cent per annum interest. The bids at 6 per cent, amounted to \$10,900,000, so that about 21 per cent is awarded at this rate of interest. The result is not essentially different from the run of the bidding, as far as known, on Saturday. Most of the bidders at 6 per cent, offered for heavier sums than they expected to get. The average of the awards on \$1,000,000 will be about 5.81 per cent per annum; comparing with an average of 4.75 per cent, on \$4,000,000, June 15 1858; the difference corresponding very nearly with the relative state of the money market now and then. Messrs. Briggs & Co., M. Morgan & Sons, Grant & Barton, H. F. Vail, Thompson Brothers, Trevor & Colgate, Bowery Savings and United States Trust Company are among the takers. The first payment on account, \$100,000, was made into the sub-treasury this afternoon. The Customs to-day were \$148,000. The disbursements \$133,468. Balance this afternoon \$3,723,948.

NORTHERN CENTRAL RAILROAD.—The following is the comparative statement of the earnings of this road for the past month and for the same month of last year. In all departments of traffic the road shows an increase over the business of May, 1858:

	1859.	1858.	Increase.
From Merchandise.....	\$36,887 88	\$28,906 69	\$ 7,981 09
" Coal.....	22,793 50	11,124 55	11,668 95
" Passengers.....	21,313 96	17,216 29	4,097 67
" Mails.....	2,425 60	1,487 50	937 50
" Sundries.....	112 00	.....	112 00
	\$89,532 34	52,725 13	24,807 31

The annexed are the earnings of the Memphis and Charleston Railroad for the month of May:

Amount Passenger Receipts.....	\$57,905 14
Amount Freight Receipts.....	25,715 52
Amount Mail Service.....	4,597 91
Amount Express, etc.....	1,137 92
Total Receipts.....	\$89,356 49
Total Expenses.....	48,699 83
Net Earnings.....	\$40,656 66

The annexed are the comparative New York and Erie earnings for May:

May, 1859.....	\$469,573
May, 1858.....	349,933

Decrease.....\$119,629

New York Central comparative earnings for the month of May:

May, 1859.....	\$412,665 83
May, 1858.....	619,197 42

Decrease.....\$97,531 59

The earnings of the Stonington Railroad in

May 1859, were.....	\$21,789 22
May 1858, were.....	16,613 94

Increase.....\$5,176 28

The May earnings of the Brooklyn City Railroad

were.....	\$2,376 09
May, 1858, were.....	34,278 46

Increase.....\$48,137 63

The receipts of the Morris Canal have been:

Total to May, 28, 1859.....	\$59,843 59
Total ending June 4, 1859.....	10,861 50—\$70,715 09

Total to May 29, 1858.....42,132 45

Week ending June 5, 1858.....8,783 91—50,916 36

Increase, 1859.....\$19,798 73

The May receipts of the Macon and Western Roads were:

In 1859.....	\$21,816 36
In 1858.....	20,904 06

Increase.....\$906 30

The May receipts of the Michigan Central Road were:

May, 1859.....	\$127,145 77
May, 1858.....	185,727 01

Decrease.....\$58,582 24

In the year ending May 31, the receipts have been:

1859.....	\$1,638,138 67
1858.....	2,428,753 52

Decrease.....\$590,619 35

The earnings of the Central Railroad Company of New Jersey for the Month of

May, 1859, were.....	\$84,136 31
For the same month last year.....	72,918 36

Increase 15 per cent.....\$11,157 95

The earnings of the Cleveland, Columbus and Cincinnati Railroad Company in May were:

Freight.....	\$41,535 88
Passenger, mails, and express.....	35,422 67
Rents.....	6,081 29

Total.....\$83,039 85

Earnings in May, 1858.....82,968 26

Increase.....\$71 59

The receipts of the Grand Trunk Railway of Canada for the week ending

May 28, were.....	\$41,833 83
Week ending May 29, 1858.....	41,628 45

Decrease.....\$205 37

Total traffic from July 1st.....	\$2,078,333 90
Same period last year.....	2,169,476 13

Decrease.....\$91,142 23

The traffic of the Great Western Railway of Canada for the week ending June 3d, 1859, was as follows:

Passengers.....	\$22,387 36
Freight and live stock.....	7,883 95
Mails and sundries.....	1,436 40

Total.....\$31,707 71

Corresponding week of last year.....36,554 71

Decrease.....\$4,847 00

WOODRUFF'S PATENT SLEEPING CARS.

AS NOW RUNNING ON THE LAKE SHORE AND LITTLE MIAMI RAILROADS.

The attention of Railroads and Private Parties is respectfully called to this new and much desired improvement in Railroad Cars.

Any information that may be desired, can be obtained of the undersigned owners of the Patent.

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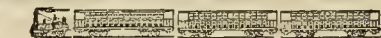
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La Salle, Rock Island,
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Prairie du Chien, St. Paul, and
St. Anthony,
And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections twice daily, at PANA for all the above points.

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Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via

PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line of

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all

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New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,
Gen'l Southern Agent, Cincinnati.

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Gen'l Passenger Agent, Chicago.

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Agents Wanted in the West and South.

Send for Circular. Address,

W. E. Braman & Co.

June 21, 1859.

Cincinnati, Hamilton and Dayton.



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LEAVE THE SIXTH STREET DEPOT DAILY.

TRAINS RUN THROUGH TO RICHMOND, LIMA, SANDUSKY, AND DELAWARE WITHOUT CHANGE OF CARS.

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FOR

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(Columbus time, which is seven minutes faster than Cincinnati.)

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8 A. M. MAIL TRAIN—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STEAMER FOR DETROIT; at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at DELAWARE with the C., C. and C. Road, for Cleveland and points East. Also connects with Junction Railroad at Hamilton for Oxford.

4:30 P. M. TRAIN—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Also, connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago. Also connects with Junction Railroad at Hamilton for Oxford.

6 P. M. TRAIN—For Dayton, Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 8 A. M.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; at the new Ticket Office on West side of Vine street, between the Post Office and the Burnet House; or at the Sixth Street Depot. D. McLAREN, Superintendent.

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New Time Table

OF THE

NEW YORK CENTRAL R. R.



Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp. 7:00 A. M.	7:00 P. M.	7:00 P. M.
Mail..... 9:00 A. M.	12:50 A. M.	
New York Exp. 11:15 A. M.	9:40 P. M.	9:00 P. M.
Night Exp. 5:00 P. M.	4:00 A. M.	4:00 A. M.
Utica Accom'n. 6:00 P. M.	Ar. U. 10:00 P. M.	
N. Y. Mail..... 11:15 P. M.	10:00 A. M.	10:00 A. M.
Leave Buffalo.	Leave Bridge.	Ar. Alb'y.
New York Exp. 5:15 A. M.	5:15 A. M.	3:30 P. M.
Steamboat Exp. 8:00 A. M.	8:00 A. M.	8:00 P. M.
Mail..... 8:00 A. M.		2:30 P. M.
Cleveland Exp. 6:00 P. M.	6:00 P. M.	4:40 A. M.
Cincinnati Exp. 11:00 P. M.	11:00 P. M.	8:30 A. M.
Utica Accom'n.		10:00 A. M.

The Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

Thursday Morning, June 30, 1859.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

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" " per annum,.....	80 00
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The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

Railroad Presidents, Superintendents and Secretaries, are requested to send us copies of all Annual and other Reports they may issue, together with their Monthly Statements, and such other matters of interest as they may be willing to furnish us.

IRWIN & Co. have been appointed General Freight Agent for the Marietta and Cincinnati Railroad, and are prepared to issue Bills Lading for the delivery of goods in New York, Philadelphia, Boston, Baltimore, etc. They propose to forward Freight as low as any body else.

LA CROSSE AND MILWAUKEE.—The stockholders of the La Crosse road are to have a meeting to raise money to carry on legal proceedings against Mr. Chamberlain, the President of one of the Boards elected at the time of the annual meeting. Mr. Cleveland proposes fifty cents per share contribution for this purpose. This, upon the \$180,000 shares reported to have been issued, would yield \$90,000.

PROPOSITION TO LEASE THE N. Y. AND ERIE TO A PRIVATE COMPANY OF CAPITALISTS.—The telegraph informs us that the proposition for a lease of the Erie Railroad was to-day submitted to the Executive Committee, accompanied by a request that the Board of Directors appoint a committee to confer with the parties proposing.

The offer is to take the road for ten years, paying \$1,500,000 for the first year, \$100,000 to be added each succeeding year for four years, and \$2,000,000 per year for the remaining years, with the privilege of a renewal for another term of ten years, at \$2,500,000 per annum. The proposition is made by an individual formerly identified with the Company, on behalf of himself and others.

VOL. 7.—No. 19.

EFFECTS OF RAILROADS IN FURNISHING EMPLOYMENT AND CREATING WEALTH.

While numbers of persons who have invested in the Stocks or Bonds of Railroads are complaining of poor returns, it may be as well to look at the bright side, and consider all the beneficial effects produced on society. In the first place we may remark, however, (as we have often done,) that the loss or failure in railroads to meet expectations, is by no means as great as many suppose. There are a large number of railroads which have paid good dividends. There are a still larger number which have always paid their interest on Bonds, and a large number of the remainder, which, though much embarrassed for the time, are undoubtedly able, in the end, to pay their debts; so that, on the whole, the great mass of railroad property is secure, and most of it will pay interest. But, let us look to other effects on society, as a counterbalance to any supposed losses in society.

1. The Railroad is an entirely new machine performing, in a better way, the great business of carrying both persons and product. It does this in a better way than was done, by horses, wagons, or water craft. Hence it introduces a new class of machinery and operatives. Now, one of the first impressions produced, by the introduction of this new machinery was, that it would supersede the old. But, what is the result? It does no such thing. Not a horse, a waggon, or a steamboat less is employed than there were before. On the contrary, they are constantly increasing. In one word, it is proved, most conclusively, that the new machinery, instead of superseding the old has, in fact, introduced an entirely new business. If it be asked how this is possible, it is enough to say, that it has carried persons in tenfold number, where, for want of time and money, they could not go before. It has carried immense quantities of grain to market, that could not be carried before. It has carried immigrants where they could not otherwise afford to go. It has developed new improvements. In one word, it has largely created its own business.

2. In doing this it has necessarily furnished labor and employment to large numbers of laborers and mechanics. It has required and paid for also, immense quantities of materials. This is a clear gain, and in most cases has reacted on the very parties complaining in the rise of their property, and in the means of new acquisitions. We may form some idea of this from the returns made in Ohio to the Commissioner of Statistics, for the roads lying wholly or in part in this State. The following facts:

Number of Employees.....	6,500
" Locomotives.....	560
" Passenger Cars.....	400
" Freight Cars.....	6,500
Cords of Wood Consumed.....	300,000

These data will enable us to estimate something like the number of persons employed,

and the amount of money distributed. Taking only the men regularly employed, we have 6,500; but, making a moderate estimate of the material required for renewal: there are 100 locomotives per annum; 40 passenger cars; 600 freight cars; besides the fuel. To make these it will require 4,000 men. The cutting and hauling of 300,000 cords of wood will require 2,000 more men. We have then the direct and constant employment of—

6,500 men in operation.
4,000 for new machinery.
2,000 for fuel.

12,500 men constantly employed.

Experience proves that the able-bodied laborers are in proportion to the entire number in community as one to five. There are, then supported by the Railroads of Ohio, 62,500 persons. But, this is probably not much more than half the true number; for, we have left out of value the renewal of ties, of bridges, and other structures; the re-grading; the renewal of iron; the oil; the station houses, etc., all of which are constantly employing large bodies of men. If we were to say, then, that in the State of Ohio there are now 100,000 people dependent on the Railroads, we would not overrate the matter. The railroads we have included in this statement are one-seventh of the whole number of miles, in the United States. There are, therefore, in the Union, 700,000 people employed in this new carrying machinery, but a small portion of which has existed more than ten years. This is a fortieth part of the whole people of the United States. We see in this brief statement the rise of a new element of society, which is exercising vast influence, not merely in the carrying trade, and on commercial business, and in the employment of capital, but in the employment and subsistence of men—the very most important of all social effects. In a state of society, where constant tendency is to create a dependent class, which for want of employment, subsist on the public, every new avenue to employment, is of great value to the social system. It is thus that new wealth is created, and we believe, as we have said, that in nine cases out of ten, the very persons who have lost in Railroad Stocks or Bonds have had that loss more than returned to them, in the increased value of other property, or new means of accumulation.

Labor is wealth, or rather all labor which is put into permanent improvements, or into machinery capable of producing an income. At least one half of all the labor. Taking, as ascertained above, 700,000 persons employed in maintaining and operating railroads only, which is equivalent to 140,000 able bodied laborers, we have a half 70,000 men constantly employed by railroads (in the United States) in increasing the permanent wealth of the country. This is equal to twenty-one millions per annum. This does not include any of the effect of the Railroad Machine, itself, on lands and commerce; but is the annual in-

crease of wealth by operating the Roads. In all that is generally said of the increased values produced by railroads, is meant the direct increase of making the road. But, this we do not include at all here. We speak only of the effect produced on society by the employment of so many laborers, and the increase of wealth by that labor. Our conviction is, that looking at it in this point of view, there are very few persons, even among unfortunate stockholders, who have not received back more than compensation for casual losses by the direct effect of railroad operation on business and property. Besides all this, general society is immensely benefitted by this new avenue to employment. To give business and labor to those who can not find, is one of the most important works in the social economy.

STATE OF THE CROPS IN OHIO.

Within a few days we have passed through a large part of Ohio, and received information from other parts. The result is, that the crops will be larger and better, than was anticipated after the late frosts. As the crops of Ohio are of very great importance to the railroads of this State, and, indeed, to the whole country, we shall state briefly what is the present condition of things.

1. OF WHEAT.—It has been said that great damage was done to the wheat crop by the late frosts; indeed, absolute destruction in many counties. This is not true, except to a very limited extent. The damage done to wheat by the frosts extended only to ten or twelve counties. In three counties, among the best, the total amount of a full crop would be 6,000,000 bushels. In these counties half the wheat is destroyed. If this be true, the loss on what might have been the crop will be 3,000,000 bushels. But the crop would have been, under favorable circumstances, at least 28,000,000 bushels. We, therefore, estimate the crop of 1859, in Ohio, at 25,000,000 bushels, which is a fair average crop. It was about the same amount last year, and a pretty good crop. The berry this year is large and fair. The flour made from it will be good.

2. CORN.—The crop of corn in the three last years in Ohio was:

In 1856.....	57,000,000 bush.
In 1857.....	82,000,000 "
In 1858.....	50,000,000 "

If there is not an unusual drought this year the crop will reach at least 80,000,000 bushels. This, it will be observed, is thirty millions of bushels more than last year. We say this, in anticipation to be sure; but, the prospect (and of that only we speak,) is such.

3. OATS.—Last year there was almost a failure of the oats in many counties. The average crop is 25,000,000 bushels. The actual crop was not over 10,000,000. So the loss last year was 15,000,000 bushels. The crop will probably be a fair one this year. If so, it will be 25,000,000—a gain on last year of 15,000,000.

4. BARLEY, POTATOES, ETC.—The smaller crops are all promising well. We think 5,000,000 bushels above last year may be counted on.

The result of this review is, that if the Summer is an average season for weather, we shall have in Ohio, 50,000,000 of bushels above the quantity last year. In estimating the effect to be produced, by this enlarged crop, we must remember that the whole of this increase is surplus, and consequently will produce so much more money in market, and so much more carriage to market. The Railroads will carry three-fifths, or 30,000,000 bushels, equal to one million of tons of freight. The freight on the Railroads of Ohio in 1858, was 3,000,000 tons. The increase on this, by our estimate, will be 33 per cent. The net receipts of the roads were \$5,500,000. As this additional freight will be carried by the same machinery, there will be little additional expense. The amount of receipts for freight was rather over half the whole; we may, therefore, count a net increase of profits, or 33 per cent. on \$2,750,000; or an increased profit of \$920,000. This profit will accrue largely to about six or eight roads; so that to them it will yield a net profit (additional) of 3 or 4 per cent.

The reader may say, that this is counting chickens before they are hatched. This may be; but, the eggs are in the nest, with a fair prospect of their being hatched. It is given only as an estimate, and we make that estimate only on the facts we have.

THE CROPS—RAILROADS.

As the prosperity and success of railroads is, in a great measure, dependent upon the crops, the season has arrived when this question becomes one of great importance and interest. It is an accepted axiom in political economy, that on the success or failure of the crops, depends the prosperity not only of railroads, but also of the country. The Economist, in speaking of the crops, says: "It has happened that with a very active foreign demand at high prices abroad, as in 1855, we have had none to spare, and in other years with an abundant surplus there has been no foreign demand. Again, the crops of the last year were short and there was no foreign demand, circumstances doubly unfortunate for agriculturists, since with a similar crop we had less prices.

"The estimated crops and actual exports, with the average export price, and the price of wheat in England, have been as follows:

Crop.	Bushels exported.	Prie.	Price in England.	
1849.....	12,309,972	\$1.09	40s.	
1850.....	104,799,230	4,658,982	1.02	40s.
1851.....	114,000,000	13,948,499	0.95	39s.
1852.....	114,000,000	18,680,686	0.79	41s.
1853.....	125,000,000	18,958,993	1.05	41s.
1854.....	111,346,167	27,000,000	1.80	80s.
1855.....	126,855,000	6,821,584	1.66	75s.
1856.....	144,522,000	25,708,013	1.73	70s.
1857.....	144,670,000	33,130,596	1.50	59s.
1858.....	140,000,000	26,487,041	1.07	44s.
1859.....	12,451,000	1.30	40s.	

"There are, of course, no means for forming an accurate estimate of the crops, and the comparative extent of them can only be approximated by taking the actual exports, and the former depend upon the state of the markets abroad to some extent, and the course of prices indicates whether that export demand is more or less than can be well spared. The census of 1840 and that of 1850 gave returns of the quantity produced.

"The census gave the crop of 1850 at 104,799,230 bushels, and the population at 24,257,720. The result would have been as follows:

Crop, 1850.....	bush.	104,799,230
Seed.....		10,479,923
		94,319,307
Export.....		13,948,499
For consumption.....		89,370,808

"This would give 3½ bush. per head. The export of 1851, the year ending in June, was, of course, the product of 1850. Now, it appears above, that with a crop of 104,799,230 bushels, of which 14,948,499 was exported, the price fell, from which it may be inferred that more could have been spared for export. The crop of 1854 was short, and although the prices abroad rose to 83s. in England—a famine rate—the exports from the United States reached only 6,821,584 bush., and it may be inferred that the high prices of that year induced farmers to sell their stocks, in the same manner that the low prices of the panic year 1857-8 induced them to hold. There could then have been no old grain left in the country. Three good crops then succeeded—1855, 1856, 1857. Of those crops, it appears, 85,325,650 bushels were exported, at \$1 66 and \$1 73 and \$1 50; the price falling in England from 70s. to 44s. The prices here then became too low for the farmers to sell, and the stock was supposed to accumulate. In August, last year, we estimated the crop of 1858 as follows:

Grain on hand, estimated.....	bush.	16,000,000
Crop of 1858 coming in.....		140,000,000
Supply.....		156,000,000
Seed.....	bush.	15,000,000
Consumption.....		105,000,000
		120,000,000

Excess for export.....bush. 36,000,000

"The consumption is taken at 3½ bush. for 30 million of people.

"Some writers objected to our estimate for consumption as too low, placing the demand for seed and consumption at 150,000,000 bush.; and leaving 6,000,000 bushels only for export, and inferring a rapid rise in prices for home use, but it will be seen over 12,000,000 bush. have been exported, and the prices are still low. The quantity of grain held in the country is still large. Those who can hold do so, under the impression that the war will, of itself, produce a good demand, which we hold to be a fallacy. The late frost is variously represented. In many quarters it is reported to have been a serious damage—equal to one-fourth the whole crop. In others, it is represented as not to have been injurious to wheat.

The fact is, probably, that enough damage has been done to increase the disposition to hold wheat, and at the same time diminish the consumption of it. It is no doubt the case that the quantity consumed varies greatly with the market availability. When that grain is high the farmers use other food and sell it, thus increasing the supply on the market. A rise to the rates current in 1854 would, no doubt, bring out large supplies, but with the present prospect of the foreign demand there is little chance of that demand. The home demand on the Atlantic will be supplied from the nearest sources, and the grain at the West will hardly feel the demand. It will sadly miss the migration and railway expenditure of the last few years."

[Correspondence of the Record.]

WISCONSIN RAILROADS.

OSHKOSH, Wis., June 27, 1859.

MESSRS. EDITORS:—

Here I am at the head of "Railroad Navigation" in the north-west—this place being the present terminus of the Chicago, St. Paul and Fond du Lac Railroad, and the most northerly point in the western States accessible by railroad.

To a person who has not kept pace with the progress of this part of the country, the signs of improvement, that are visible on every hand, are quite astonishing. Populous towns, villages, and cities, "with all the modern improvements," highly cultivated farms; beautiful country seats; handsome farm houses and villas; capacious barns, mills, and all the *et ceteras* of a thrifty and flourishing country, meet the astonished traveler on every hand. And, what is quite as acceptable, as good and comfortable hotels as can be found in any part of the United States—and in many places houses that would put to shame many of the so-called "first class" hotels, in Ohio and the Eastern States.

This great work, has nearly all been achieved in the past decennial, by the railroad and iron horse—those great embodiments of the nineteenth century—which have already crossed the barrier of the Mississippi in half a dozen places, and one more speedy than the rest, has touched the waters of the Missouri, and will soon be pushing into the Rocky Mountains, and the far off Pacific.

The Wisconsin roads now finished, are the La Crosse and Milwaukee, 195 miles; Milwaukee and Mississippi, 192 miles; the Chicago, St. Paul and Fond du Lac, from the La Crosse to Oshkosh, 48 miles; the Racine and Mississippi, to Durand, 85 miles, and graded to Freeport, Illinois; the Kenosha and Beloit, about 15 miles; the Milwaukee, Watertown and Baraboo Valley, 64 miles; Milwaukee and Horicon, 41 miles; and Chicago and Milwaukee, from State Line, 40 miles—in all about 680 miles.

As a matter of course the finances of these

roads are in a most deplorable condition, but to define precisely what that condition is, would puzzle a half dozen "Philadelphia Lawyers." The La Crosse, with its stupendous frauds on the people, the purchase and sale of the Legislature and the Executive, etc., etc., which are known to your readers, was sold last month, and bid in by a portion of its Bondholders; but is still, I believe, in the hands of the lessee—Philo Chamberlain, who has been running it since its completion in October last. But whoever gets possession of it in the general scramble that is now making, will have a good thing; for it must ultimately become a first rate paying road. It is probably the most northerly east and west road that will be built in the State for many years, if ever, and has, consequently, as tributaries, all northern Wisconsin, west of Lake Winnebago, with the exception of a narrow strip on the borders of Lake Superior, and the greater portion of Minnesota, extending far away to the Red River of the North, the Saskatchewan, and, ultimately, the North Pacific Railroad—a stretch of country far greater than all embraced in the empires of the Old World now engaged in terrible warfare.

The Chicago and Milwaukee, and the Chicago, St. Paul and Fond du Lac, are, I believe, in the hands of trustees—if not already sold to the Bondholders. But they will ultimately become good paying roads. The C. & M. is certainly doing a first rate passenger business at pretty full rates.

The completion of the link of 56 miles, now under contract, between Janesville and the La Crosse Road, will do a good deal for the Chicago, St. Paul and Fond du Lac Road—though the distance from Oshkosh to Chicago by that line is some seven miles greater than by the present route via Milwaukee. The extension of the line from this place to Green Bay—fifty miles—which will be done at no distant day, will also add greatly to its business.

Of the future of the Milwaukee and Mississippi, and the Racine and Mississippi, I am not so sanguine. Still, economy in the management, with a reasonable increase in the population of the country through which they pass, may ultimately enable them to pay something.

Notwithstanding the humiliating blow that has been given the credit of the State, by the dishonorable purchase and sale of the Governor and members of its Legislature by the rascally managers of the La Crosse, Wisconsin—or as it should, *Ouisconsin*—will in time become a populous and wealthy State.

Yours truly, J. D.

The Lafayette and Indianapolis Railroad Company has declared a semi-annual dividend of 3½ per cent. There are but few roads in Indiana or elsewhere that have been able to make dividends since the financial crisis of 1857.

CHICAGO, IOWA AND NEBRASKA RAILROAD CELEBRATION.

The Cedar Valley Times comes to us this week, with glowing accounts of the opening celebration of the C. I. & N. R. R. The crowded state of our columns prevents our giving more than one or two extracts. The Mayor of Cedar Rapids, D. N. Sprague, Esq., welcomed the visitors in a neat speech, as follows:

GENTLEMEN.—It has become my pleasant duty to extend to you, on the behalf of my fellow citizens, a welcome to the hospitalities of our infant city; and to assure you of our appreciation of the honor conferred upon us by the presence of so large a representation of the intelligence and enterprise of our neighboring cities and States. We not only feel honored by your visit, gentlemen, but we regard it as an evidence that our young city—minute and obscure as it may appear on the map of this "great country,"—has already attracted the discerning eye of the commercial world, beyond the borders of our State; that our broad and fertile prairies possess attraction, which, we hope will prove irresistible to the agriculturists of the older portions of our country; and that the almost unlimited power of our beautiful river, when once viewed by the practical eye of Eastern manufacturers, shall not much longer be permitted to run idly to waste.

Save those furnished by the hand of Nature, gentlemen, we have few points of attraction to which we can direct your attention. Our city is yet, as we may say, in its "swaddling clothes." We have had but little time, and less means, to expend in embellishments. The ornamental has been crowded back to make room for the useful. And yet, gentlemen, you will pardon us, I trust, if with some degree of pride, we direct your attention to yon "Poor Man's College,"—our noble common school edifice, as an evidence that, in the hurry of preparing homes for our wives, we have not forgotten the intellectual food so necessary for the sustenance of our children; and to our houses of public worship, which point to the fact, that, in the great struggle for supremacy over nature, we have not been unmindful of the homage due to that all wise Creator, whose hand guided the steps of our Pioneers to this beautiful valley, and whose bounty has sustained us in our early struggles; and last of all, to our humble aid in forging these iron bands, which now indissolubly bind us to our brethren at the East.

Gentlemen, I will not longer detain you, but in behalf of my fellow citizens of Cedar Rapids, I bid you a cordial, a heart-felt welcome to our city, and to our homes. Every latch string is out—every door is open; and though our entertainment may be humble and frugal, it is proffered with such an assurance of welcome, as, we trust, shall make amends for that in which we may lack.

The following beautiful poem, written for the occasion by C. H. Webb, Esq., of Fulton City, Ill., was read by Mr. Curtis of the same place.

A MISPRINT CORRECTED.

"Westward the star of Empire takes its way,"
Said Bishop Berkley—since the Bishop's day,
Four score of years, in waves of surging rhyme,
Mark the world's wake and swell the sea of Time:
Though kings have perished with the changing tide,
And thrones, like sea-waifs, strew the ocean-side;
Still floats a banner from the blue unfurled—
The stars of Empire crown the Western World!
Our prairie-skies their regal right attest:
Born in the purple—Hail, O, kingly west!

Yet musing now, I think instead of star!
The good old Bishop should have written cart:
For lo! the car still westward takes its way;
Outstrips the winds, and dares a race with day.
And some years hence, perchance a train shall run—
Start moments late and overtake the sun!
E'en now, close linked by tie, and chain, and band,
The night and morning journey hand in hand;
And, sweeping nearer with their trailing fold,
The skirts of evening brush the gates of gold!

The woven wonder of a weaver's dream—
A shuttle thrown across the world by steam!
From eastern looms a fitting beam is sped—
It woofs the prairies with an iron thread;
And deftly spun among the flowers, behold,
A cloth of iron—no "poets cloth of gold,"

The car of Empire westward takes its way;
The god of steam pursues the god of day:
The prairies tremble with his clanging tread,
And shuddering forests start aside in dread—
Still westward, westward! Mississippi's tide
In vain essays to stay his mighty stride:
He clears the rushing water with a bound—
Far on the plains his dancing plumes are found;
On, on! he breasts the dark Missouri's wave,
And find a rest where planets find a grave!

Here in this valley where the Cedar's plume,
In green remembrance keeps the Red Man's tomb,

Alone, of erst, the Indian lover strayed,
And breathed his passion to the dusky maid;
The listening stars heard but the lover's sigh,
The low confession and the soft reply:
How strangely changed—within the valley hurled
A bomb comes bursting from the outer world!
The clang of iron, the madeneel shriek of steam,
Usurp the sway that silence held supreme,
And echo starts in wonder from her cave,
To find her life where silence found a grave.

The Iron Horse—he stands before our sight
Harnessed, yet free; rejoicing in his might,
His mine floats far in scornful pride and wrath—
What recketh he of Lyons in the path?
His ribs of brass, each sinew triple steel,
Earth's bosom groans beneath his iron heel:
With breath of fire, and heart of throbbing flame
His pulsing veins may Jove's own lineage claim.
What! yoke the gods? Unbind him from the cars
To join his brother planet, flaming Mars.

And now a toast—a churl is he indeed,
Who'll grudge this bumper to our fiery steed—
Your glasses fill—and bear a cup to me—
I'll give you, boys, with triple "three times three"—

THE IRON HORSE—when bolts would block the way
Of progress, may he give a ringing—Neigh.

MEETING OF THE CHICAGO EXCURSIONISTS AT THE MERCHANTS' EXCHANGE.

At a meeting of the Chicago Excursionists, held Monday afternoon, Benjamin Eggleston was appointed President and Joseph Glenn Secretary.

A committee of five, composed of Judge A. G. W. Carter, Wm. H. Hieft, E. S. Hubbard and Isaac E. Osborn, of this city, and S. Reynolds, of Covington, were appointed to draft resolutions expressive of their opinions of the railroads over which they traveled, and the kindness they received from the people of Chicago.

The committee reported the following preamble and resolutions, which were unanimously adopted:

WHEREAS, The courtesies extended to us by the Cincinnati, Hamilton and Dayton, the Dayton and Michigan, and Fort Wayne and Chicago Railroads, were not only gratifying in the highest degree, but the who arrangements for the trip were so perfect and complete, that it left nothing to be done on their part to render our trip pleasant and agreeable in every respect, and the conditions of these roads, the time made in running, the ease and comfort of the cars, are all, in our judgment, the perfection of railroad traveling; and,

WHEREAS, The courtesies extended to us while in Chicago, by its citizens, were as unexpected as they were gratifying, and evinced a desire on their part to exhaust their hospitality upon us, and their efforts in this behalf were only measured by our capacity to receive; and,

WHEREAS, The Chicago and Rock Island, Galena and Chicago; Chicago and Milwaukee; Milwaukee and Chicago; Chicago, Burlington and Quincy; Michigan Central; Milwaukee and Mississippi; Chicago, St. Paul and Fond du Lac; St. Paul, Fond du Lac and Lucrose; Illinois Central and Ohio and Mississippi Railroads, having also tendered to us the use of their roads on our trip; therefore,

Resolved, That we tender our most sincere thanks to the President and officers of the Cincinnati, Hamilton and Dayton, the Dayton and Michigan, and the Pittsburgh, Fort Wayne and Chicago Railroads for their kindness, care and attention; and we wish the direct line from this city to Chicago, formed by these railroad companies, the most full and complete success, and we know they well deserve it.

Resolved, That we tender our most cordial, earnest and sincere thanks to the Mayor and corporate authorities and the city of Chicago, for their generous and whole-souled liberality and hospitality to us during our brief sojourn in their midst, and we never shall forget the happy time we spent among them.

Resolved, That the chain of good feeling and genuine friendship wrought between the Gem of the Lakes and the Queen of the West, by the two recent excursions of the citizens of each city to each, shall never be broken, but shall be made stronger and stronger, firmer and firmer, as time advances, in the increased prosperity and happiness of both.

Resolved, That we must give our special thanks on this occasion, joyfully and earnestly, to S. S. L'Hommé, Esq., the President, and Dan. McLaren, Esq., the Superintendent of the Cincinnati, Hamilton and Dayton Railroad, for their unremitting urbanity and attention in accompanying us, and seeing us put safely and readily through, to and from Chicago; and we hereby declare it as our honest opinion to these two gentlemen, that if they ever "come up" for anything, they will have the united voice of the Excursionists to put them through.

THE BUFFALO & STATE LINE R. R. MACHINE SHOPS.

The Buffalo and State Line Railroad have comparatively lately made, and are still making, important additions to their mechanical facilities, for the repairs and construction of cars and engines. Directly at the end of the Hamburg street Canal, the Company have filled up several acres of land, upon which they have erected, and have in process of erection, new and admirably arranged machine shops. The company have constructed upon this property several bridges and sewers to render the road and property perfectly reliable as regards drainage. The track extends for some distance along the banks of the canal, enabling freight to or from the east to be transferred without delay or trouble. Besides these improvements, spacious and convenient stock pens are hard by, and the arrangements of the road will hardly be equalled when all shall have been completed.

The new machine shops of the road are really so fine that they deserve especial notice, and we submit a description of them:

The Machine Shop of the Buffalo and State Line Railroad comprise a building 169 feet long by 100 feet wide, with 21 feet wall, 20 windows on the front side, 3 by 12 feet, and 8 windows and 7 pair of doors for the passage of the engines for repairs, each having a distinct track. On the back side, this main part has a truss roof, covered with Warren & Bros. Cement, and is supported through the center by ten cast iron columns, on which hangs the main line of shafting, planned by Mr. Sweet, the master mechanic of the road, on a new and improved method, (the couplings forming the pulleys,) and built by E. Burroughs, of Rochester.

On either end of this main part is a two story building, or wing, with a roof running in an opposite direction from, and projecting the main building on the street, ten feet, giving the front the appearance of a hollow square.

One of these wings has no middle floor, but is left an unbroken space from floor to roof, and is used as a blacksmith and boiler making shop. The upper tier of windows are hung on rods to tilt, giving facilities for the escape of the gaseous matters from the fires, and rendering the room always healthy and sweet, which must necessarily increase the amount of work produced from what it would be in an ill-ventilated shop.

The other wing contains in the lower story, the end fronting the street, a drafting room, 20 by 24 feet, properly supplied with tools, and facilities for planning the work for the several hands employed about the institution; a time keeper's office, 15 by 17 feet, containing, among other things, a telegraph instrument, which the time keeper operates for the purposes of the master mechanic. This office also contains a large window facing the hall, or main entrance, that the time keeper may see all that passes. In the rear is the private office of Mr. Sweet, the master mechanic, the dimensions of which are 12 by 17 feet, handsomely furnished and arranged. On the opposite side of this main hall is a duplicate room, 37 by 24 feet, supplied with proper shelving for stowing duplicate machinery. Next to this is an oil and waste room, 12 by 37 feet, with brick floor, and otherwise well protected from fire, where the oils are taken when bought, drawn off, compounded—as Mr. Sweet compounds most of his oils—and distributed to the engines and stations, and regularly charged, together with the waste, and reported at the end of each month, in connection

with the expenses for maintenance and operating of machinery.

Next this is the stationary engine room, 12 by 37 feet, and runs upward through both stories. This room is furnished with an upright, low pressure condensing engine, of new and novel construction, planned by Mr. Sweet and W. R. Greenleaf, the builder at Silver Creek. The size of the engine is 16 by 24, and one of its peculiarities is the air pump, being in a vault directly underneath the cylinder, and the main piston rod running through the cylinder to the air pump, thus making a direct connected air pump.

At the bottom of this vault is a channel or bed plate supported by four columns which connect with the bed plate of the engine at the top, two of which form the condenser. After the steam has done its execution, it is exhausted into a hollow space around the cylinder, termed a steam jacket, to prevent loss of heat by radiation, as well as condensation in the cylinder; from thence it passes directly to the top of these two columns, when the current of steam is met by a stream of Niagara water, formed into a spray, by being passed through perforated copper plate directly over those columns or condensers, by which means the steam is instantly condensed and precipitated to the channel plate below, from whence it is taken by the air pump and deposited in a large reservoir in the top of the shop, which is connected by a three-inch cast iron pipe with the reservoirs in the round house, from whence it passes into the tanks of the several engines as they pass out of the house, preparatory to the commencement of their trip, giving them not only warm water, but very much improved in quality, as about one-fourth of the whole amount is condensed steam. Mr. Sweet considers this water, which amounts to about 7,000 gallons per day, worth \$10 per day to the company. This water, in its passage from the air pump to the reservoir, passes through a chamber supplied with a valve, which, by a simple process when the engine is in motion, can be weighed so as to convert the air pump into a fire engine, for the safety of the buildings, and for filling boilers for trial, etc., etc.

The work of the air pump is all done below the piston, and by a tight head on top of the air pump, a vacuum is formed above the piston, thus counterbalancing the gravity of the reciprocating parts of the engine. A force pump is bolted to the side of the air pump, and operated by an arm keyed to the piston rod above the air pump, which takes its water from the channel plate hot, and deposits it in the mud heater to boiler.

This engine has attached to it Greenleaf's variable expansion cut off, which is a perfectly balanced valve controlled by the governor, which works with remarkable precision and economy. The driving shaft of the engine is 14 feet long, and rests at the cylinder end upon a cast iron arched girder, which passes from one side of the room to the other, with proper fastenings into the walls. The girder has a moulding and finish to correspond with a belt cornice which runs entirely around the room, and which the girder intersects as it passes to the wall. This girder is supported in the center by two finished columns. The tail end of the shaft passed through the wall into the machine shop, where it supports a 10 feet fly or barrel wheel, the shaft resting in a heavy pillared block, firmly fastened in the wall, with a bearing 6 by 16 inches. The floor of the engine room is raised 10 inches above the top floor, with steps at each end. In the center of the room is a flight of stairs, with banisters surrounding them, which lead

RAILROAD MEETING AT RALEIGH, VA.—A meeting was held at the Court House in Raleigh, Va., on the 6th inst., the object of which was stated to be to take measures for the early completion of the Covington and Ohio Railroad. After passing several resolutions in favor of the measure, the meeting adjourned to meet at Raleigh, C. H., on the 29th of July next.

The St. Louis ore furnace is but one, but with two parts; the lower furnace being like any ordinary boiling furnace some three feet

longer, and being supplied with a draft of air from a fan.—Immediately over this lower furnace and about seven feet above, is the upper furnace. This is connected to a lower furnace (where the heat leaves it) by a flue, and discharges it through a stack directly over the grate bars. The upper furnace is square, and contains forty eight tubes, sixteen by six inches, in pairs, opened slides at the bottom. These tubes are eight feet deep, and are constructed of fire brick tongued and grooved to keep out the flame of the fire, and the waste heat from the lower furnace passes between eight rows of six each on its way to the stack.

These bricks become heated, and transmit their heat to the ore and coal poured into them—the ore and coal being pulverized, the heat sets free the carbon which enters the one and discarbonizes it. While the impurities pass off as gases, the top of the tubes being open, being in such small particles, in such close contact with the ore, also in small particles, and given the time, (forty-eight hours,) the work must needs be thoroughly done without waste of material.

On being dropped into the lower furnace it is therefore pig iron in small particles. Watching it closely as it fell, I could see that the carbon was entirely consumed and became coke, which helps to heat the metal till it is consumed. The metal is then shoved up nearer the bridge or greatest heat of the fire, when it is operated the same as any other iron; and when every particle has absorbed oxygen it is then malleable and is rolled into balls for the squeezer.

The whole improvement consists in not only making pig metal with the waste heat of the furnace, but avoiding that anomaly in the manufacture of pig iron of carbonizing with charcoal and oxydizing with an air blast, at the same time causing waste of material and large amounts of fuel to overcome it. In hot blast furnaces part of this waste is overcome, as part of the oxygen is consumed before entering the blast furnace.

The time given it (48 hours) seems to have the effect to evaporate all the sulphur, (which has ever been the bug-bear of all attempts heretofore to make good iron with sulphurous coal, for which iron has a great affinity, without waste of material, as the product of 51 per cent. is nearly as much as pig metal can be produced out of the same ore.

An examination of the muck bars shows that it is all fibrous; not a crystal in it, which are abundant in all cold short irons, and is attributed to the sulphur in the coal with which it is worked.

The muck bar has also another property which will make it especially valuable for rails, that is of welding at a very low heat. I saw the bars while reeling, doubled and welded while at about a "cherry red" heat. The fault of English rails scalding is because of the imperfect weld separating like the crust of rich pastry, and after the top crust is off the rest is worthless.

The quality of the iron having been tested by myself after rolling into bar iron, I have no hesitation in pronouncing it superior, and from the facts of my own observation, can safely predict that the old saying of "Coals to Newcastle," will be fulfilled, in a very few years, by the shipment of Missouri bar iron to Pittsburgh and the Ohio river, made from the Missouri ore direct into bar iron, and to predict a future for this city that the wildest dream has never reached.

I desire, in conclusion, and in a very few words, to lay a ghost that continues to rise up

whenever this process is mentioned, and that is of the Benton furnace. At the very least that can be said, Criswell's is an improvement upon it, and my own opinion is that seven-eighths of the success of this improvement consists in the purity and richness of the ore, but whether all attempts heretofore have resulted in failure with the aforesaid "spirit" or not, I have no controversy with any one who holds the converse of the proposition "that a million of failures do not disprove one fact."

The success of this furnace being a demonstrated fact, all other failures were but as stepping stones to it.

Respectfully,
A. MILTENBERGER.

PROFITS OF PASSENGERS AND FREIGHTS.

We made some remarks recently on the relative profits of passengers and freight upon railroads. The returns of any of the roads will show at once the results of the trade. Thus the New York Central in its annual report gives the annual figures for 1858:

	Receipts.	Cost of transportation.	Cost per cent.
Passengers.....	\$2,532,646	1,610,863	64 per cent.
Freight.....	3,700,270	1,876,429	51 per cent.

Thus the passengers cost in years of active business 64 per cent. of the receipts, and when the proportion of the gross income derived from passengers is large, the cost of transportation will average more.

The returns of the Central Road compare, one year with another, as follows, taking the year of the largest number of passengers and comparing it with the year of the smallest number:

	No. passengers.	Income	Cost of passengers.	Cost, per cent.	Aver. distance carried, miles.
1855.....	2,717,477	\$3,242,929	\$1,681,544	57	62
1858.....	2,103,030	2,532,646	1,610,863	64	64
Decrease.....	614,447	709,533	250,681	7	1
There was a decrease in way travel and an increase in through travel. If we take the returns of the Erie and Central together, for the same year, we have results as follows:					
	Miscellaneous.	Freight.	Passengers.	Total.	Cost.
Erie.....	\$140,593	4,545,782	1,656,673	6,340,050	3,343,380
Central.....	171,928	4,338,541	3,997,378	7,707,348	4,097,876
This bears on the two roads as follows:					
Erie.....	Cost of Freight.		Per cent.	Cost passenger traffic.	Per cent.
Central.....	\$2,972,881		50	1,070,409	63
	2,104,376		50	1,933,592	64

This was in the year of the largest revenues, and high rates of freight and passengers. The per cent. of cost of passengers diminishes with the number carried, since a full train costs no more than an empty one. This year all the trains have run at very low rates, and the per cent. of cost is immensely greater. Not only have the numbers of passengers been less, but the price per head is less. The business of this year will show no profit whatever. The cost of transportation equals the gross income.

The receipts of the New York Central Railroad are given monthly, compared with the

last fiscal year, when the figures were as follows:

	1857-8.	1858-9.	Decrease.	Increase.
October.....	\$631,442	657,728	.....	6,286
November.....	610,735	545,219	65,516	.....
December.....	652,799	566,406	146,393	.....
January.....	930,375	382,308	48,067	.....
February.....	404,225	372,225	36,001	.....
March.....	557,820	512,699	45,127	.....
April.....	701,916	486,679	215,237	.....
May.....	537,966	412,665	145,301	.....

Total 8 months.....4,571,285

June.....465,605

July.....458,654

August.....538,375

September.....653,375

Total 12 mo's..\$6,636,375

The decrease for the eight months of the fiscal year to the close of May was, it appears, \$695,356, or nearly \$90,000 per month average. The monthly figures, as here given, are confirmed by the aggregates, which correspond with the aggregate in the annual report. The decline in the winter months was less it appears than when the canals were open. The decline in revenue this year has been doubly in diminished traffic and lessened prices. The cost of carrying a barrel of flour from Buffalo to Albany was the highest in 1854, being 51 cents, and the lowest in 1858, 42 cents. This year there has been an actual loss of seven cents on every barrel carried.—*Economist.*

RAILROAD SECURITIES.—The New York *Tribune*, of the 24th, presents the following rather gloomy picture:

It can not be denied that the result of the past year's business on five of the prominent Western railroads has been very discouraging to shareholders, and presents but little temptation to invest, even at the present comparatively low prices. The Michigan Central, formerly a favorite stock with the solid men of Boston, earned only \$21,000 during the year over expenses, interest on debt, &c. The Michigan Southern shows a still more Flemish statement—the result of the year's business being only \$1,300, not charging the interest on the unsettled floating debt. The actual deficiency is, probably, nearly \$75,000. The Rock Island, after payment of interest, rent of Bureau Valley road, &c., shows but a small surplus.

The Cleveland and Toledo, according to the last statement, earned about six thousand net for the year, and the Galena, which earned, last year, about five per cent., is, according to the business of the current six months, earning at the rate of two and a half per cent. this year. This stock has paid as much as twenty-two per cent. dividends in a year, and the Rock Island, in addition to ten per cent. per annum, paid, on one occasion, an extra dividend of ten per cent. Cleveland and Toledo paid dividends for a while by borrowing, and when the crash came, funded a portion of its floating debt by selling a portion of its seven per cent. bonds at fifty cents on the dollar.—The Michigan Southern went on making dividends for years, sustained by a fallacious prosperity, throwing out its useless branches in every direction, until its crisis came and left it struggling in bankruptcy, with a floating debt of two and a half millions.

The Michigan Central, until within a year or two, paid eight per cent. dividends, yet last year it was forced to renew a maturing bonded debt, by selling eight per cent. new bonds at seventy-five per cent., and, under the present reduced traffic, is worked entirely for the benefit of the bondholders. It is not at all surprising that, with such results as these, to say nothing of Lacrosse, Milwaukee and Mississipp-

MARIETTA AND CINCINNATI COMPANY—NEW ARRANGEMENTS FOR THE FORECLOSURE OF FIRST AND SECOND MORTGAGES.—We learn upon what may be considered reliable authority, that Mr. SAMUEL F. HALLETT and Ex-President MILLARD FILLMORE have been left out of the new arrangement that has been perfected in Europe, for the foreclosure of the first and second mortgages of this road.

The new arrangement bears so strong a family resemblance to the original undertaking, that it must be admitted, Mr. Samuel Hallett is entitled to all the credit of the original scheme.

J. P. JACKSON, Esq., of this city, is connected with the prosecution of the suit, already undertaken by cross bill in the Ross county Courts, and urges upon the Cincinnati-Bondholders acquiescence in the scheme agreed upon in London, and signed by foreign holders, of \$2,000,000 of first mortgage, and of about \$1,900,000 second mortgage bonds, (the first mortgage covering \$2,500,000, and the second \$2,000,000,) is as follows:

1. They appoint Ebenezer Waugh Fernie, Esq., of London, their agent and attorney in fact, to get possession of the Marietta and Cincinnati Railroad: amicably, if it can be done; if not, to obtain a foreclosure of the mortgages.

2. Wm. F. Roelofson, Esq., of Ohio, is made the alternate, to act in case Mr. Fernie should decline, or die.

3. Mr. Fernie is authorized to purchase in the Road under the mortgages, and to bid, in his discretion, a sum therefor which shall be equal to eighty per cent. for the first mortgage, and seventy per cent. for the second mortgage bonds. Should any one bid a sum beyond this, to let the same go, but to make the purchase at the lowest possible rate.

4. After the purchase is made, he, the said Fernie, is to hold, use and operate the Road in trust, for the use and benefit of the parties signing the agreement, or the modified one as hereinafter mentioned; such measures to be taken to put the same in order after the purchase, as the owners may then deem advisable and proper under the circumstances.

5. The terms of agreement, as signed by the foreign holders, seem to contemplate that, after the purchase of the Road by Mr. Fernie, the same shall be held by him for the use and benefit of the first and second mortgage holders equally, without priority. The one at 80, the other at 70 on the par. This seems to have been assented to by the first mortgage holders, because they are likewise holders of second mortgages in about equal amounts.

6. The contract now to be signed by the American holders is the same as that signed by the foreign, with this important modification, that after the Road shall have been bought in by Mr. Fernie, the priority of the first mortgage holders is continued and retained as now, until they are paid and satisfied at the rate of 80.

7. Mr. Fernie undertakes to act under the power, pay all expenses, including counsel fees, court costs, and all other charges, and to save the bondholders harmless therefrom; he to receive in lieu of all other compensation, a commission of ten per cent. on the sum realized by the purchase of the road. His pay to be received in kind—that is to say, the same that the mortgage creditors shall receive.

8. The right is reserved on the part of American holders to appoint one or more fit persons to act with Mr. Fernie, as the advisory committee, representing their interests.

9. The American holders are requested to

call and examine the contract, and sign the modified agreement, now in the hands of J. P. Jackson, Esq., on or before the first day of July next, and to deposit with them the bonds they hold.

It is understood that Noah L. Wilson, Esq., late President of the Marietta & Cincinnati Co., favors the new scheme, of which Mr. Fernie is the representative.—*Commercial.*

OUR RAILROADS.—We clip the following from the *Houston Telegraph* of the 10th:

We note with pleasure activity on all the roads. Railroad iron is now arriving all the time for three of the Houston Roads, and they are being pushed forward with all possible speed. There are now 228 miles of railroad open in the State, of which 195½ are in connection with this city, being an increase of 57 miles in six months. There are 124 more graded, of which 99 are in connection with Houston, and besides this, 160 in the hands of responsible contractors. The amount it is contemplated to open between now and 1st of January is 75 miles, for which the iron is now mostly here or on its way.

The Indianola Courier, speaking of the Indianola Railroad says:

We note with satisfaction, and are pleased to record, that the work of grading the first section of our road is steadily progressing. The recent additions to the laboring force have brought up the lingering though strenuously exerted efforts of the comparatively scanty number before employed, and the work is now advanced well on to the sixth mile. Mr. Shouse informs us that his arrangements, for labor are now so well ordered that he expects no difficulty in the future, and he is certain that the grade will be finished by the 1st of September.

The Richmond Reporter of the 11th says:

The work upon the Railroad bridge is progressing rapidly, considering the disadvantages under which the Company are laboring for the want of an engine for pile-driving. This is now done by hand. The laborers are divided into sets, and work alternately—often until the night is far advanced. By this means, this part of the work is nearly completed, and will probably render the engine which is being repaired, unnecessary. In the meantime, the western extension of the road has not been suspended, but ties for the road, and timbers for the San Bernard bridge, are ferried across the river, and taken on in considerable quantities.

The Brenham Enquirer learns that the hands employed on the W. C. R. R. are now encamped and at work on Woodard's Creek, some three miles from that place, having been attracted there by the inducements offered of good range and water.

CEDAR RAPIDS AND MISSOURI RIVER R. R. CO., ELECTION OF OFFICERS.—The Board of Directors of this company organized on the 14th inst., by electing, as President, L. B. Crocker, of Oswego, N. Y.; Vice President, G. M. Woodbury, of Marshall, Iowa; Secretary, W. W. Walker, of Cedar Rapids; Treasurer, John Weare, of Cedar Rapids;—Executive Committee, L. B. Crocker, G. M. Woodbury, John Weare, John F. Ely, and W. C. Salsbury.

MONETARY AND COMMERCIAL.

Money during the past week has been in better supply than for a few weeks previous. The demand is, however, moderate, and rates have more of a settled feature, and may be quoted at ten and twelve. For the next ten days there will be a slightly increased demand to meet the payments maturing in early part of July.

Eastern Exchange is without change since our last, the supply is, however, good, and the market easy at ②½ prem.

The New York *Courier and Enquirer* of June 25th, says the Bank Statement for the past week shows a decrease in all the leading items:

In Loans, a decrease of.....	\$35,000
In Specie, a decrease of.....	1,432,000
In Circulation, a decrease of.....	65,000
In Deposits, a decrease of.....	1,934,000

Compared with the corresponding week of 1858 the following are the results:

Years.	Loans.	Specie.	Circulation.	Deposits.
1858..	\$118,885,000	31,831,000	7,912,000	102,868,000
1859..	121,744,000	21,759,000	8,216,000	77,193,000

Inc....	\$2,859,000			
Dec....		10,072,000	998,000	25,675,000

The amount of Specie shipped to Europe during the week ending June 25th was..... \$1,620,381 60
Previously reported..... 31,431,107 12

Total for 1859.....	\$34,051,478 12
Same time 1857.....	12,146 67 00
Same time 1858.....	22,076,402 00

"The Stock Market shows the effect of the favorable news from Europe and the better feeling of the Money Market, now that the receipts of gold from California promise to equal the shipments to Europe. At the First Board prices advanced materially with moderate sales. Missouri Sixes sold at 86½ and 86½, the latter being the price on Saturday. North Carolina Sixes sold at 98½; Virginia Sixes at 98½; New York Central sold at 73½, ½ advance, sales 1700; Michigan Southern, preferred, was the most active share of the list, selling from 28 to 28½ against 27½ on Saturday, sales 3090 shares; Hudson River advanced ½; Harlem preferred, ½; Reading, ½; Michigan Central, ½; Michigan Southern old stock, ½; Galena and Chicago, ½; Illinois Central, ½."

The following are the taxable returns of different home and foreign Insurance Companies in the city, as made to County Auditor Mathews:

HOME COMPANIES.	
Firemen's Insurance Company.....	\$103,075 53
Cincinnati Insurance Company.....	12,653 72
Washington Insurance Company.....	95,237 18
Merchants' and Manufacturers' Insurance Co..	19,139 00
City Insurance Company.....	76,308 00
Western Insurance Company.....	67,604 75
Eagle Insurance Company.....	65,010 00
National Insurance Company.....	65,985 75
Central Insurance Companies.....	41,530 54
Commercial Insurance Company.....	21,910 00
Union Insurance Company.....	14,904 63
Queen City Insurance Company.....	8,397 93
Citizens' Insurance Company.....	8,600 00
Buckeye State Insurance Company.....	not reported.
Home Insurance Company.....	10,919 00
Ohio Life Insurance Company.....	
Total.....	\$791,647 25

FOREIGN COMPANIES.	
Etna Insurance Company, (J. H. Carter Agent)	\$26,945 00
Etna Insurance Company, (H. J. Lindsey, Aut)	23,378 92
Etna Insurance Company, (John J. Hooker, Agent).....	3,309 59
Etna Insurance Company, (J. B. Bennett, General Agent).....	3,319 38
North American Fire Insurance Company.....	5,443 52
Mutual Life Insurance Company, New York.....	9,481 67
Hartford Fire Insurance Company, Hartford.....	5,946 21
Hampden Fire Insurance Company.....	1,470 73
Connecticut Fire Insurance Company.....	717 97
Conway Fire Insurance Company.....	735 22
New England Mutual Life Insurance Company.....	2,397 49
Pennsylvania Mutual Life Insurance Company.....	1,556 83
Howard Fire Insurance Company, Philadelphia.....	987 74
State Fire Insurance Company, New Haven.....	1,157 57
Commonwealth Insurance Company, Philadelphia.....	1,668 15
Mutual Benefit Life Insurance Company.....	16,113 91
Atlantic Insurance Company, Providence.....	3,936 85
Commonwealth, Harrisburg.....	576 00
Atlantic, Brooklyn, New York.....	1,304 00
Phoenix, New York.....	1,925 57
Providence Washington, Providence, R. I.....	2,090 32
Roger Williams, Providence.....	1,426 80
Goodhue, N. Y.....	580 06
Resolute, N. Y.....	1,574 62
Lamar, N. Y.....	2,950 18
Indemnity, N. Y.....	3,076 49
Lorillard, N. Y.....	1,133 66

Washington, N. Y.	1,460 24
Consolidated, Philadelphia	992 73
Manhattan Life, New York	920 49
Insurance Company of North America	3,817 13
Unity Insurance Company, London	2,906 58
Great Western Insurance Co.	867 25
Connecticut Mutual Life Insurance Co.	14,716 18
Phenix Fire Insurance Co.	2,939 63
Springfield Co. of Massachusetts	3,750 11
Mutual Benefit, Life, of Newark, N. J.	370 15
Arctic Fire Insurance Co., N. Y.	966 75
Brevort, N. Y.	183 31
Mercantile	90 00
New World	110 00
Norwich Fire, Norwich	530 07
Franklin Fire Insurance Company, Philadelphia	10,949 32
Royal Fire and Life, London	10,600 12
Home Insurance Company, N. Y.	10,258 20
Fireman's, Charleston S. C.	320 95
West Massachusetts, Pittsfield	1,828 78
Metropolitan, New York	2,766 46
Continental, "	3,493 72
Niagara, "	1,414 69
North America, "	1,378 89
Humboldt, "	835 13
Merchants', Hartford, Conn.	446 36
New York Life, New York	4,890 84
Charter-Oak Life Hartford	4,996 70
Charter-Oak Fire, "	1,470 79
Mutual Life, New York	692 26
Hope Fire, "	313 72
North-western, Oswego, New York	6,690 02
New England Mutual Life, (Pierce, Agent)	151 00
Liverpool and London	20,200 00
Total	\$247,125 66

The returns for taxation of certain incorporated companies, banks, and bankers, of this city and county, were as follows:

RETURNS OF BANKS AND BANKERS FOR 1859.

Groesbeck & Co.	573,416 50
Kinney, Espy & Co.	276,323 99
Evans & Co.	237,692 00
Lafayette Banking Co.	105,425 00
Gilmore & Brotherton	100,000 00
Commercial Bank of Cincinnati	87,901 70
Nettleton, Lowry & Co.	69,471 26
Bank of the Ohio Valley	54,370 59
A. L. Mowry	50,780 10
E. G. Burkhart & Co.	50,000 00
Fallis, Brown & Co.	48,591 76
C. F. Adre & Co.	45,333 00
B. Homans & Co.	25,931 25
G. H. Bessing & Co.	25,070 63
A. G. Burt	21,004 16
Smith & Gilbert	20,000 00
J. B. Morton	18,565 44
Wood, Lea & Co.	15,007 00
J. F. Dinkin	15,000 00
C. E. Nourse & Co.	14,755 68
J. B. Ramsey	12,000 00
B. Bazley	11,275 00
James F. Meline	10,775 00
S. S. Davis & Co.	10,000 00
S. S. Rowe & Co.	8,073 62
F. A. Johnson	5,133 19
Ewin & Beakes	3,000 00
Bepler & Co.	2,900 25
John W. Clark	1,000 00
G. W. Clark	200 00
Total	\$1,910,888 87

The following were the earnings of the Galena and Chicago Union Railroad Company from the 8th to the 15th of June:

	1848.	1859.	Dec.
Freight	\$36,249 82	\$16,614 48	\$16,735 35
Passengers	6,964 70	7,941 99	1,752 71
Mails, etc.	1,000 00	1,000 00	

Total.....\$47,044 52 28,556 47 18,488 05

The Chicago Times calls this "positively frightful" to stockholders.

The May earnings of the Toledo and Western Road, (Wabash Valley) were:

Passengers	\$19,794 90
Freight	36,959 84
Miscellaneous	3,116 66

Total.....\$60,071 39

The third week in June upon the Michigan Southern gave of earnings \$28,674, making for three weeks \$79,333. The June earnings of this Company for the past six years stand as follows:

1853	\$149,946 19
1854	214,584 22
1855	248,370 71
1856	225,039 11
1857	197,418 43
1858	178,927 54

The May earnings of the Great Western R. R., Illinois, were:

May, 1859	\$26,620 06
May, 1858	28,695 44

Increase.....\$7,974 62

On the Sandusky, Mansfield & Newark R. R. the earnings were:

May, 1859	\$20,250 35
May, 1858	18,144 59

Increase.....\$2,105 76

On the Scioto & Hocking Valley R. R. the earnings were:

May, 1859	\$3,689 11
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The following are the receipts of the Memphis & Charleston R. R. for May, 1859:

Amount of passenger receipts	\$57,905 14
" freight	25,715 52
" mail service	4,597 91
" express, etc	1,137 92

Total receipts	\$89,356 49
Total expenses	48,699 83

Total amount of net earnings.....\$40,656 66

The traffic of the Great Western Railway, of Canada, for the week ending June 10, 1859, was as follows:

Passengers	\$12,524 41
Freight and live stock	7,516 61
Mails and sundries	1,727 81

Total.....\$31,568 83

Corresponding week of last year.....32,778 13

Decrease.....\$1,209 30

The business of the Cleveland & Toledo Railway for the years ending April 30, 1858 and 1859, compares thus:

	1859.	1858.	Decrease.
From passengers	\$485,537 45	588,370 41	102,832 96
Freight, mails, etc.	312,618 20	341,882 05	29,263 85

Total	\$798,155 65	930,252 46	132,096 81
Operating expenses	383,699 73	495,462 01	112,762 28

Net earnings	\$414,455 92	433,790 45	19,334 53
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The earnings of the Northern Central (Md.) Railway for the month of May, compare as follows:

	1859.	1858.	Increase.
From freight	\$59,681 38	40,031 34	19,650 04
From passengers	21,313 96	17,246 29	4,107 67
From mails, etc.	2,537 00	1,487 50	1,049 50

Total.....\$83,532 34 58,765 13 24,807 21

The earnings of the Pittsburgh, Fort Wayne & Chicago Railway for the month of May, compare as follows:

	1859.	1858.	Increase.
From freight	\$60,546 51	45,858 89	14,687 62
From passengers	68,454 89	64,449 18	3,985 41
From mails, etc.	8,056 25	5,056 72	2,999 53

Total.....\$137,017 35 115,404 79 22,612 56

The gross earnings of the New York Central Railway for the month of May, 1859, were.....\$412,675

For the same month last year.....557,965

Decrease.....\$145,300

The earnings of the New York & Erie Railway for the month of May, 1859, were.....\$349,853

For the same month last year.....469,573

Decrease.....\$119,629

The actual earnings of the Catawissa Railway for May and for 9 months ending May 31, compare thus:

	1859.	1858.	Increase.
May	\$26,516 21	22,707 79	3,808 42
9 months	214,147 74	171,023 56	43,064 10

The traffic receipts of the Grand Trunk Railway of Canada for the week ending June 4, 1859, were.....\$40,386 61

For the week ending June 5, 1858.....38,732 36

Increase.....\$1,654 25

Miles open in 1859, 880; do in 1858, 849; increase, 31.

RETURNS OF RAILROAD COMPANIES.

LITTLE MIAMI RAILROAD COMPANY.

Real and fixed property	\$437 619 79
Moveable property	112,249 11

Total real and personal.....\$549,758 90

CINCINNATI, HAMILTON & DAYTON RAILROAD COMPANY.

Real and fixed property	\$411,132 50
Moveable property	133,933 33

Total real and personal.....\$545,065 83

MARIETTA AND CINCINNATI RAILROAD COMPANY.

In Cincinnati, Third Ward	\$287 37
OHIO AND MISSISSIPPI RAILROAD COMPANY, (UNDER PROTEST.)	

Real and fixed property	\$219,995 00
Moveable property	41,100 00

Total real and personal.....\$261,095 00

MISCELLANEOUS.

Cincinnati Gas Light and Coke Company	\$758,717 34
Telegraph and Turnpike Companies	95,987 00

Total real and personal.....\$854,691 34

RECAPITULATION.

Banks and Bankers	\$1,910,888 87
Little Miami Railroad Company	519,838 90
Cincinnati, Hamilton & Dayton Railroad Co.	545,065 83

Marietta & Cincinnati Railroad Company	287 37
Ohio & Mississippi Railroad Company	261,695 00
Miscellaneous	834,691 34

Grand total.....\$4,121,668 21

CINCINNATI STOCK SALES.

BY HEWSON AND HOLMES.

June 29, 1859.

BONDS.

\$10,000 Little Miami R. R. Co. 6 per cent. 1st Mort. Bonds	85
\$6,000 Cin., Ham. & Dayton R. R. Co. 7 per cent. 2d Mort. Bonds	85 and int.
\$2,000 Cin., Ham. & Dayton R. R. Co. 7 per cent. 1st Mort. Bonds	95
\$5,000 Ohio & Miss. R. R. Co. 7 per cent. Construction Bonds	25
\$2,000 Fayette County, Ky., 6 per cent. Bonds	72 1/2
\$1,000 City of Cincinnati, 6 per cent. Bonds due 1860	98
\$3,000 Township Bonds, Ohio	65
\$1,000 Junction, Ind., R. R. Co., 10 per cent. Real Estate Bonds	50 and int.
\$2,000 Col. & Xenia R. R. Co. 7 per cent. Dividend Bonds, due 1860	95
\$1,000 Indianapolis & Cin. R. R. Co. 10 per cent. Income Bonds	96 1/2

STOCKS.

100 Shares Little Miami R. R. Co.	84
15 " " "	85
60 " Cin., Ham. & Day. R. R.	64
12 " " "	65
84 " Indianapolis & Cin. R. R.	55
100 " Washington Ins. Co.	102 1/2
25 " Cincinnati Insurance Co.	90

We have no important change to notice in the Stock Market since the date of our last issue. The feature of dullness, so peculiar at this season of the year, begins to show itself, and we accordingly report fewer transactions, yet at very firm prices.

The prospects of the crop, now being harvested, are of the most flattering character, and will soon give to our Western Roads full employment for all the rolling stock they can command.

There has been a good demand for money during the past week, but all good paper has been freely taken at ten to twelve per cent.; in outside circles, negotiations have been more difficult, and rates are a little firmer at 1 1/2 to 1 3/4 per cent. per month, the preparation to meet payments falling due July next will absorb much of the floating capital on the market.

We have no change to notice in the market for Exchange, and our last quotations will cover those now current.

IMPORTANT DECISION.

Circuit Court of the United States, District of Indiana.—*Aspinwall et al. vs. The Board of Commissioners for the County of Knox*.—May Term, 1859.—Petition for *Mandamus*.

Counsel—Samuel Judah, N. C. McLean, for plaintiff. Judge McDonald for defendant.

OPINION BY HON. E. M. HUNTINGTON.

At the May Term of this Court, 1857, a judgment was recovered in this Court in favor of the plaintiff, and against the defendant for a large sum of money found due upon the interest warrants of certain bonds issued by the County of Knox to the Ohio and Mississippi Railroad Company, in payment of subscription of stock made by that county to said road. This judgment was, at the last term of the Supreme Court of the United States, affirmed by that tribunal. The judgment of that Court is final and conclusive between these parties.

By the act of the Legislature under which this subscription of stock was made, and these bonds issued, it was provided that the Commissioners of Knox County should levy a tax upon the property of the county to pay these bonds, and the interest as it fell due.

For several years the Board of Commissioners have failed and refused to levy the tax. At last the parties holding these bonds have sued on these interest warrants and ob-

tained a judgment. There being no property in the county subject to the payment of this judgment, the plaintiffs, at the present term of this Court, moved the Court for an alternative *mandamus* to compel the Board of County Commissioners to show cause why they had not levied the tax, &c. To this proceeding the County Board, by counsel, appeared, acknowledged service, &c., and filed a demurrer. After argument, the Court granted the *mandamus* on the ground that the tax to be levied was by the act directed to be levied at the June term of said Board, and that as no such term had intervened since the final determination of the cause, the Board should have the then and now passed June term in which to make the levy before a *mandamus* should issue. By the affidavit of David Judah, the attorney of the plaintiffs, and the affidavit of N. C. McLean, the attorney of other judgment creditors, it appears that application was made by them personally to the County Board at its June session, just passed, to make the levy required by law, and that the Board preemptorily and utterly refused to do so. Under this state of facts the plaintiffs ask for a *mandamus* to compel the Board to execute this duty.

In opposition to this motion, a transcript of the proceedings of the County Board is read, which shows that the regular sessions of the Board are limited to nine days, and that the County Board have adjourned over until the 6th of July next, without having decided the question, with a view, as is expressed in the order, to consult public opinion in the matter. It has already been decided by this Court, at this term, on the former motion, that, in order to sustain the jurisdiction of this Court, and enforce its judgments and decrees, the Court may issue this prerogative writ. Indeed, to deny this power is to deny the jurisdiction of the Court, for it would be a farce to say that this Court has the power to give a judgment without the power to enforce it. It can be enforced in but one way, and that is by a levy of the tax required by the law. The proper officers refuse to levy the tax, and the only remedy is to enforce obedience by this writ.

The usual course in cases of *mandamus* is to obtain a rule upon the defendant to show cause why the writ should not issue; and if the cause be deemed insufficient then a *mandamus* in the alternative issues—to which a return is to be made; and if good cause is not thereby shown for not doing the thing required, then a peremptory *mandamus* is issued. But if both parties have been fully heard, and there is no dispute about the facts, the Court will, if perfectly satisfied, without going through the form of an alternative *mandamus*, grant a peremptory *mandamus* in the first instance. 9. Smedes and Marshall's Miss. Rep., p. 77. Board of Police of A. vs. Grant, Angell & Ames, section 729, and notes p. 819.

The present application is for a peremptory *mandamus*. As far as the facts of the case are concerned, there is nothing left for determination. The plaintiffs have a judgment given by the Court and affirmed by the Supreme Court of the United States. The right of the plaintiffs to receive from the county of Knox the amount of this judgment is settled, and can not be disputed. Payment can be enforced in only one way, and that according to the terms of the act of the Legislature.

The Board whose duty it was to levy the tax has refused to do so, and have adjourned over beyond the period fixed by law for their June term. This Board has for years refused to perform a duty expressly enjoined by public law. The Court gave them the June session just passed to perform this duty. This Board still refuses. It is a case clear of all doubt as far as the rights of the parties are concerned; there are no facts to dispute; none to investigate. The county is concluded by the judgment of the highest Court in the Union.

The Board has a mere ministerial duty to perform, and they contumaciously refuse to perform it, and we know of no other mode in which it can be enforced than by this prerogative writ. An execution would be unavailing, for not only is there no property by which the judgment can be collected, but if there were the act requires the debt to be satisfied by a tax on the property of the county. Already has an alternative writ been issued and service acknowledged—it was quashed on the ground that it was prematurely asked for.

But what is the object of issuing an alternative writ, unless it be to give the party against whom it is issued the right to set up some real and substantial defense to the proceeding? In this case what defense can be made? The judgment is final—the amount due is fixed—it can not be changed—there can be no defense to the merits, it can only be purely technical and go to the right of the party to enforce this judgment. This question has already been decided. We grant the writ.

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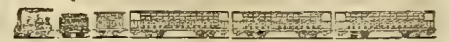
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Steamboat Exp... 7:00 A. M.	7:00 P. M.	7:00 P. M.
Mail..... 9:00 A. M.	12:50 A. M.	
New York Exp... 11:15 A. M.	9:00 P. M.	9:00 P. M.
Night Exp..... 5:00 P. M.	4:00 A. M.	4:00 A. M.
Utica Accom'n... 6:00 P. M.	Ar. U. 10:00 P. M.	
N. Y. Mail..... 11:15 P. M.	10:00 A. M.	10:00 A. M.
Leave Buffalo.	Leave Bridge.	Ar. Albany.
New York Exp... 5:15 A. M.	5:15 A. M.	3:30 P. M.
Steamboat Exp... 8:00 A. M.	8:00 A. M.	8:00 P. M.
Mail.....		2:30 P. M.
Cleveland Exp... 6:00 P. M.	6:00 P. M.	4:40 A. M.
Cincinnati Exp... 11:00 P. M.	11:00 P. M.	8:30 A. M.
Utica Accom'n...		10:00 A. M.

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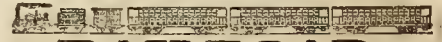
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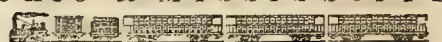
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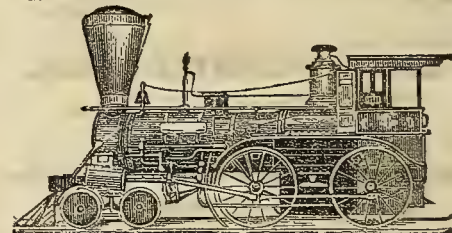
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President of the Board,

Jan 5 tr.

The Railroad Record.

E. D. MANSFIELD,
T. WRIGHTSON. } Editors.

CINCINNATI:
Thursday Morning, July 7, 1859.

THE RAILROAD RECORD,

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The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

Railroad Presidents, Superintendents and Secretaries, are requested to send us copies of all Annual and other Reports they may issue, together with their Monthly Statements, and such other matters of interest as they may be willing to furnish us

The following are the June earnings of the Cincinnati, Hamilton and Dayton Railroad compared with the corresponding month of last year:

June, 1859.....	\$41,321 47
June, 1858.....	35,063 75

Increase of 1859..... \$6,252 72

In addition to the Fort Wayne and Chicago Railroad interest, we hear of no important failures to pay. The City of Covington, Ky., did not meet her interest, and two or three Western Roads which have heretofore been delinquent, were again so. The County of Mason, Ky., paid to-day, but gives notice to her creditors that hereafter she shall only consider the \$1,000 bond issued to the Maysville and Lexington Road as \$833 33, and pay interest on that sum, and the \$1,000 bond issued to the Maysville and Big Sandy Road as \$650, and pay on that sum. The county also announces the intention to buy up the debt as fast as possible, and will be prepared soon to offer 75 for \$15,000@20,000 of the bonds issued to the Maysville and Lexington Road. This cool piece of repudiation will probably be set right by the Supreme Court of the State, which has just granted a mandamus on the City of Maysville to compel the payment of certain interest.—*N. Y. Tribune*.

Vol. 7.—No. 29.

LATE RAILROAD ACCIDENTS.

BRIDGE DISASTERS—THE MICHIGAN ROAD CASE.

We are certainly not among those who would hold the Officers or Managers of Railroads to account for accidents, which could not be foreseen, or by care and diligence avoided. But, we would hold them to strict account for what they *can* prevent.

Now, on this head, we would call our readers attention to certain great principles.

1. It is ascertained beyond a doubt, by examination and experience, that most of the accidents and disasters which befall mankind (death and epidemics excepted,) are *avoidable*. By the exercise of reason, care and watchfulness, nine-tenths of all accidents *may be avoided*. Looking back to three of the great railroad accidents, of a few years past, the whole intelligent public will be agreed, at this day, that they were the results of sheer negligence, for which there was little or no excuse.

The greatest of these, the catastrophe of the *Norwalk Bridge* (Conn.) could have been avoided in the simplest manner. Why was there not a watch? Why not a man with a lantern at the curve? Why was the train running at such a speed, in such a place? No man can doubt now, that that great calamity was avoidable by a little care.

The next great accident was that of the Excursion Train on the North-Pennsylvania Road. That was a *collision*; and for a collision there is no excuse. There is no excuse for a collision, and every reader will agree with us, if he examines the case. In the first place trains run on time tables, and if those time tables are arranged properly, the trains can not meet on time. In the next place, if the Conductor and Engineer both have watches, it is next to impossible that they should mistake the time. And, lastly, if there is a good clock, at each station, they can not be off time at leaving. The truth is, in the accident to the Excursion Train, one of the Conductors was off time. One of the ablest and most experienced Superintendents told us (and it proved true on his road,) that it was *impossible* to have a collision, where the tables did not make one, and the Conductors were not off time.

The third great accident was that of the train near *Burlington*, (N. J.) From the responsibility of this accident, the *Camden and Amboy Company* and its employees, have made a great effort to get rid of; but, it wont do. Public opinion holds them rightly responsible for an accident caused by sheer recklessness. It is enough to say, *the train was running back*. Why should a train run back? Why should it not go precisely where it was intended to go, and there stop? We speak of loaded trains, and not those which are merely changing place at a depot. Why should a passenger train ever move one yard

back? The experienced Superintendent, to whom we allude, was asked—"How do you manage in moving trains back?" "Sir, we never have trains move back." "How can you help it?" "There is no need of it, whatever. Let each train go to its place, and stay there." So we say, the public justly held the managers liable for the Burlington Accident. We say, then, that it is a settled principle, that nearly all accidents and disasters are *avoidable*.

2. Secondly, it flows from this, that Railroad Managers are properly held responsible to extreme care, and precaution to avoid them. Perhaps they think this hard, and that the public are severe upon them. Not so. It is clearly reasonable. The want of extreme caution is simply the want of expending a few more dollars; and are dollars to be put in competition with life, and peace, and happiness?

Let us examine now the various kinds of accidents which may occur, and see whether the managers are not responsible.

First—of Collisions. We have shown already, that these ought *never* to occur. There is no need of them in any case. Let the Time Table be right, and the Conductor and Engineer go by the watch precisely, and there can be no collision.

Secondly—obstructions on the road. We will admit that an accident from this cause *may* occur without blame. A malicious villain may place something on the road, or take up bars, at some point, without being discovered; but, this must be a rare occurrence, and in many roads would be impossible. How can it be avoided? By keeping a *watch on the road*. This is done in England on every part of the road. But, some may say, this would be too expensive for some roads. Not at all. The station houses do not average more than four or five miles apart; and it would be no great expense to keep a man between them to go over his part of the road in advance of each passenger train. Some roads do this, so thoroughly, that no accident of that kind can occur. For example, the Hudson River Railroad is in many places overhung by rocks, which some times fall down. Some years since a large number of heavy stones fell across the road, in a bad place, and but few minutes in advance of the train; yet, so close was the watch, that it was seen, and the train warned, in time. In a very short time, a band of workmen were collected, and the road completely cleared. Let the road be thoroughly watched, and accidents from obstructions can very rarely occur.

Thirdly—accidents from the breaking of axles or bars would seem at first, not to be avoidable; but they are in most cases, not always.

It is known that these accidents occur generally from some defect in the iron, and that

almost always the actual break is preceded by a crack or flaw. Hence, it is the practice on the well managed roads now, to *sound* the wheels, when the train arrives, at a principal station; and more than once, we have seen a car taken off the train, for a defective wheel found in this way. Now, suppose a bad accident should occur from the breaking of an axle, when the wheels *had not been sounded*; would not the managers of that road be held responsible?

It is perfectly true, the axle might have broke even when sounded. But, in that case, the Company would not be to blame. They had used all proper care.

Fourth. We come now to the worst class of accidents we have had in late years, and we hold the managers to be responsible in every one of them. We mean the accidents arising from the breaking down of Bridges and Culverts. We say these are all *avoidable*. How?

First, whether a bridge is sound and is capable of bearing a given weight is *ascertainable*. Any engineer or superintendent of Road can test a bridge for this purpose.

In the next place, if, as often happens, a heavy storm, or freshet, may have carried away, or damaged bridges, and culverts, that also is *ascertainable*; and no passenger train should cross any bridge or culvert after a storm or freshet, *till it has been examined*. Here lies the great cause of all this class of accidents. *The want of watching* the road. If there is, and can be no watch, in certain places, then stop the train, till the facts can be ascertained. Why should a useless danger be incurred? Now, this is precisely the case of the late terrible disaster on the Michigan Southern Road; and we hold that, the managers of that road can not be wholly acquitted of blame. A very severe, and remarkable storm had just occurred. Was it not probable that some of the bridges, or culverts, would be injured? Why, in such a case, is not a watch provided? And, why does a conductor of any common sense, rush over bridges, and culverts, in hot haste, when he knows that a heavy wind and rain, has just passed over?

We would not hold Railroad Managers responsible for accidents clearly unavoidable. But, this is not the case with collisions; or with bridge disasters. They may be avoided.

It happens, however, to the credit of our Railroad Companies, that *four-fifths* of the deaths and wounds to passengers do not happen from any disaster to the train or road whatever; but, to their own negligence and folly.

It is creditable also to the companies, that a very great improvement has taken place, as to Railroad accidents. Those which occur from any fault of the road are now very rare; and soon, we trust, will not occur at all.

GOLD MINING.

Nothing, perhaps, struck the world with more astonishment in modern times, than the prodigious results of Gold Mining in California; nor is the surprise at all lessened, by the continuance of their productiveness.—Taking one year with another, from 1846 to the present time, the mines of California have produced \$50,000,000 per annum; i. e., *six hundred and fifty millions of dollars*. This is a mass of gold which the world had never seen mined in the same space of time.

Since then, the Australia Mines have been discovered, and they have yielded in some seven years, about the same quantity, per annum, or about *four hundred millions*. We now have about (including all mines,) one hundred and twenty millions per annum; so that, at this rate of production, Gold must be produced in ten years equal to *twelve hundred millions*! All our ideas of the scarcity of the precious metals are entirely overthrown; and it is quite obvious, that if this rate of production is to go on all the relations of value, as based on gold, must be changed. Laws may be what they may, in relation to coinage, an equality of values between gold and other products can not be maintained, when the bulk of gold increases, at so much greater rate, than does that of silver, copper, or other metals. The real value of gold must decline, or rather (gold being a legal tender) the prices of other property must rise. Sooner or later this result is inevitable.

But, it seems, that not only is the production of gold likely to continue, but it is likely to increase. We have lately two new discoveries of gold deposits; and we are led to believe, that America contains the great original deposits of gold for the whole earth. We recently see new mines opened on Frazer's River, from which large sums have already been brought; and still more recently, we find productive mines on the head waters of the Platte River—near Pikes Peak.

If there be any truth in the testimony of the most intelligent and respectable men, gold is found abundantly in that region. If so, what reason is there to doubt that it may be found in similar situations, throughout the whole range of the Rocky Mountains? The gold found in the earth and sands of streams is merely an indication of the gold deposits, at the source of those streams, from which it has been washed. It makes the existence of mines above, certain. Thus, we see, that while the gold found in Cherry creek was not very productive, the quartz mine was soon after found at the source of the Platte, which, according to all accounts, is richer than any veins of gold yet discovered. Recent accounts from the Platte Mines, show this peculiarity. The gold is found in a *broken or rotten* quartz, running in a fissure, in the main body of

rocks. This fissure is from an inch to two feet thick, and is walled up, on both sides, by the rock.

Such is the state of the first Platte Mines; but, surely, there must be more than one ravine, or fissure, containing these deposits. Why not many? Why not on the sources of other streams, in a similar geographical formation? In one word, where is to be the limit of this gold production? Even supposing it to stop where it is, what an immense mass of gold must, in a few years, be thrown upon the markets? We can not resist the conclusion, that commerce and finance are to experience great changes; under the immense and sudden supply of precious metals, so much beyond the immediate demand of commerce, and so intimately connected with the standard of value, and the regulation of prices. We think, too, this change will be more sudden, than is generally supposed. Wise men will look out for it.

RAILROAD ELECTIONS.—The annual meeting of the shareholders of the Michigan Central Road was held in Detroit on Monday morning, when the following gentlemen were elected Directors for the ensuing year:

J. W. Brooks, Boston, Mass.; John M. Forbes, Boston, Mass.; D. D. Williamson, New York; Erastus Corning, Albany, N. Y.; Edward Minturn, New York; R. B. Forbes, Boston, Mass.; H. H. Hunnewell, Boston, Mass.; Nathaniel Thayer, Boston, Mass.; Elon Farnsworth, Detroit, Mich.

The present executive officers of the road were re-elected by the Board. No dividend was declared, the Board determining to pay none when the net profits of the road would not clearly justify it. The annual reports will be issued in a few days.

At the meeting of the Directors of the Minnesota and Pacific Railroad Company in St. Paul, the following gentlemen were elected to the respective offices named:

President, Edmund Rice; *Vice President*, R. R. Nelson; *Secretary*, T. M. Metcalf; *Treasurer*, E. Caldwell; *Executive Committee*, R. R. Nelson, D. C. Shepard, W. B. Shute, T. M. Metcalf; E. Caldwell; *Attorney*, J. B. Brisbin; *Engineer*, D. C. Shepard. Gov. Ramsey resigned his place as a member of the Board of Directors. The vacancy occasioned by this resignation is not yet filled.

The receipts of the Illinois Central Road, for three weeks in June, are only about \$4,000 behind those of the same period of last year. The receipts of the Land Office will be in the neighborhood of \$45,000 or \$50,000.

An effort is being made to change the gauge of the O. & M. R. R. to 4.8½ or 4.10, on both divisions of the road.

STEAM BOILER EXPLOSIONS.

To J. L. MINER, Esq.:

Ever since the introduction of steam as a motive power, the subject of Steam Boiler Explosions has engaged the attention of scientific and practical men.

Learned committees of scientific societies, acting, frequently, under the patronage of governments, have, from time to time, investigated and experimented for the purpose of ascertaining the true cause, or causes, and suggesting reliable preventives, of explosions.

Individual enterprise has been zealously and assiduously directed to the same objects.

Various theories as to the true cause of explosions, have been suggested, and many devices invented to prevent such disasters.

Acting upon facts and information thus derived, Governments have legislated on the subject—establishing and enforcing various precautionary regulations.

The most extensive and thorough investigation of the whole subject, in this country, was made twenty odd years ago by a Committee of the Franklin Institute, at the request of the Treasury Department of the United States. Their report was published in the Transactions of that Society in the year 1836.

The results at which this Committee arrived, were, that Steam Boilers explode from the following causes:

1st. *Excessive pressure within the boiler, the pressure being gradually increased.*

2d. *The presence of unduly heated metal within a boiler.*

3d. *Defects in the construction of a boiler, or its appendages.*

4th. *The carelessness, or ignorance, of those intrusted with the Steam engine.*

Since the publication of that report the prevailing opinion has been, that all Steam Boiler explosions are referable to the above causes.

They form the basis of the legislation of our Government upon the subject.

According to this theory the active agent of explosions is Steam pressure, gradually increased. The committee say—"That all the circumstances attending the most violent explosions may occur without a sudden increase of pressure within a boiler."

For the purpose of safety, this committee selected the pit of a deserted stone quarry for their experiments. They raised steam gradually, and produced two violent explosions, one of a copper, and the other of an iron, boiler; which seemed to them fully to warrant the announcement of the foregoing conclusion. Especially, as they had tested and as they believed, disproved, the theories, that explosions result from the instantaneous development of steam from highly heated metal; from the generation and explosion of hydrogen gas; from superheated steam; or from electricity.

The committee did not consider the principle, or law, of steam expansion, nor tell us how, any amount of simple steam pressure that can be obtained in a boiler is capable of exerting a projectile force adequate in degree and acting in the manner to produce all the results of a violent explosion.

They seem not to have suspected the existence of any other element, or combination of elements, inscrutable to them, in the boilers they experimented with at the time of the explosions. Having, as they supposed, ascertained an adequate cause for the result—simple steam pressure, gradually developed—it

would have been unphilosophical for them to assign any other cause.

Boilers well constructed, of good iron from $\frac{1}{4}$ to $\frac{3}{4}$ of an inch in thickness, and from $3\frac{1}{2}$ to 4 feet in diameter, will bear a steam pressure, without rupturing, of, from 500 to 700 pounds per square inch; yet, it is a well established fact that many of the most violent explosions have occurred when the steam pressure, as indicated by the gauges, did not exceed one third the above amount—and, in some instances, explosions have occurred at 50, 30, 16, and even 10 lbs. pressure.

For example,—The "MOSELLE," just before the explosion, carried from 125 to 150 lbs. The effect of this explosion was likened to that of a mine of gunpowder. "All four boilers exploded at once. The machinery and boat were made a complete wreck. Fragments of boilers, and of human bodies, were thrown more than a quarter of a mile. *Parts of the boiler were twisted up like leather.*"

THE REDSTONE—"At the second revolution made to start forward, her three boilers exploded at the same time, with a tremendous noise. In the explosion, her chimneys were blown nearly across the river. The awful force of the explosion can be conceived from the fact that a large piece of one of the boilers was blown *half a mile*, lacking five or six yards. The river for some distance below Carrollton was strewn with the fragments of the boat, machinery, furniture and clothing."

At the time of the explosion, she had on, as near as could be ascertained, 140 lbs. of steam. She had carried before, with safety, as high as 170 lbs.

"The 'KNOXVILLE,'—lying at the levee, exploded two (of her four) boilers, destroying many lives, and making a complete wreck of the boat, and also doing much injury to other steamers in the vicinity.

"All the main deck which was under the boilers, and most of the guards were destroyed, every thing overhead forward of the engines was carried away, and its innumerable fragments covered the surface of the water, and the adjoining boats. * * *

"One inside boiler, 26 feet long, and 42 inches in diameter, left the 'Knoxville' nearly at right angles, and, after breaking the guard of the 'Martha Washington,' lying alongside, its forward end passed upward, and through the cabin of this boat, leaving a breach of 12 feet wide, and thence making its way through the side of the 'Griffin Yeatman,' and landed in the ladies' cabin, bottom up. * * *

"The larboard outside boiler took its flight from the boat's end, and at an (horizontal) angle of 120° from the course taken from the other boiler; at 295 feet, it came in contact with the end of the third tier of flour barrels 45 feet, on it passed through another pile of barrels, destroying many down to the first tier. Here it diverged 18° and continued on 200 feet more, when it rested on the ground." * * *

The "Anglo Norman," exploded under 24 inches of the mercury gauge, although she blew off at 26 inches a few hours before the explosion. The boiler, weighing twenty-eight tons, was projected over the pilot house into the Gulf.

A new boiler at Morris & Co.'s Factory, Philadelphia, was set up without pump or engine, for the purpose of being tested. It exploded at a 150 lbs. pressure.

The following is taken from an account of the explosion by a committee of the Franklin Institute:

"That the boiler in question was of a cylindrical form, 5 feet in diameter and 16 feet

long, having a fire-box at one end, from which three main flues, the largest of which was, 20 inches in diameter, extending to the smoke-box, from which twelve return flues, 6 inches in diameter, carried the products of combustion to the chimney. Near the end of the boiler there was a steam dome four feet in diameter, which was placed over an opening of the same size in the shell of the boiler. The iron of which the boiler was made, was of the best quality, 0.3 inches in thickness. This boiler was intended for the use of a Steamboat, and was to be used under 100 lbs. pressure. The parties who ordered it, required it should first be tested under a pressure of 150 lbs. Upon this trial the fire was kept up until the safety valve lifted under a pressure of 148 lbs.; an additional weight was then added sufficient to give the requisite pressure of 150 lbs., and after a few moments, the experiment was considered as satisfactory, and directions were given to open the fire-doors; at this moment an explosion took place, killing one of the persons present, and severely injuring two others, one of whom has since died. The boiler was torn into at least three pieces, by fractures perpendicular to the axis,—one of which (the fire box end) was thrown forward and came in contact, with two large Cornish boilers which were lying in front of it, indicating by its effect upon them, the terrific violence with which it had been projected. The waist of the boiler was torn from the steam dome, ripped open, and flattened out upon the wharf where it lay, while the steam dome, and other portions, were thrown high into the air, and fell into the Delaware River, whence they have not been recovered. The main flue was also separated from the rest and thrown into the dock, whence it was afterwards recovered and found flattened, but apparently not collapsed by the pressure of the steam.

In seeking to account for this explosion, we may in the first place remark, that there appears no reason whatever, to suspect the existence of a low water level. The experiment had been but a short time in progress, no water or steam had been lost, except that which was blown off at the safety-valve; nor was any pump in connection with the boiler by which cold water might be thrown upon an exposed and over-heated surface. This, then, the most common of all causes of explosion of steam boilers, can not be reverted to, to explain this one. Nor is there any reason to suspect carelessness or recklessness on the part of those in charge of the experiment, nor negligence or mistake in the calculation of the pressure on the safety-valve. The boiler was at the time under the charge of perfectly competent persons, who were under no excitement, had no inducement to rashness, nor were under the circumstances, likely to lead to over haste, and whose lives were, as the result too sadly proved, exposed in the event of an explosion. The Committee submitted to the proof of the breaking apparatus, pieces of the iron taken from the edges of the fractures, and the results showed that the iron was of good quality."

The foregoing are examples of comparatively high pressure at the times of the explosions, yet some of these boilers had been subjected to much higher pressure on previous occasions, without exploding; and the point of pressure at which explosion took place, was far below what ordinary boilers should sustain without rupture.

The following is an instance where there

was little or no pressure at the time of the explosion:

" * —At Mr. D. Smith's Paper Mill, a large egg shaped boiler, used for boiling rags, made of stout boiler iron, and weighing about 4 tons, was filled in the afternoon for boiling, by putting into it two tons of rags, and a half barrel, or about 500 lbs. of soda ash and two barrels of lime soda ash, previously dissolved in water, and water put in sufficient to cover the rags—the whole not filling it quite full. It was then all closed tight with the exception of a small hole at the top which was left open until it begun to boil, then plugged up. It was heated by steam brought through a three inch pipe, from a distance of eighty feet from the steam boilers, and was situated in a small building thirty feet from the side of the main building. After boiling about five hours, it exploded, tearing off a part of the bottom, which was thrown without touching the mill, high over the top, and landing 300 feet from the place it started. There were two distinct explosions or reports, and the fireman says that the brick came with the second report, though it was not as loud as the first, and he had just previously turned off a part of the steam. The steam is generated in six boilers, and but a small part is used to boil the rags, the rest being used in the cylinder of the paper machinery to dry the paper. The building in which this rag boiler was situated, was shivered into fragments, and another boiler situated by the side of this one, and apparently filled in the same manner, and boiling at the same time, was left uninjured with the exception of being moved a few inches. A large iron wrench that was left on the top of the boiler, was carried with it the whole distance. Some of the rags and hot water were thrown as high as the top of the mill, which is four stories high." * * *

In this case the boiler had no fire about it. The explosion, therefore, could not have resulted from unduly heated metal, deficiency of water, or injecting water on unduly heated metal. There was little or no steam pressure—only water in active ebullition.

I claim, that Steam Boiler Explosions, properly so called—such as the foregoing are examples of—are not caused by simple steam pressure—much or little, gradually, or rapidly, developed.

Steam pressure, like hydrostatic, or atmospheric pressure, may be gradually increased, until it becomes greater than the strength of the boiler will resist, when a rupture will take place in the weakest part, and the steam will escape—and this will be, comparatively harmless, though the boiler be so strong as to require 1000 lbs. pressure to the square inch, to rupture it.

Steam pressure acts upon the principle of expansion. Such is its law. It can not act in any other way. While in all explosions of boilers there is active percussion—produced by explosive elements. Hence, the curling of boiler plates, like scorched leather, so frequently noticed; the shattering of the wood-work of vessels, and the total wreck of everything within the sphere of the explosive elements.

If the steam within an ordinary boiler, at 500 lbs. pressure to the square inch, were instantly freed, it would not expand beyond 65 inches from the shell of the boiler. At that distance it would be arrested by an equilibrium of the atmosphere.

It is a law of nature, that the compression and expansion of atmospheric air depend upon the force applied in proportion to the space occupied. If a cylinder 48 inches long in the

clear, closed at the bottom, into which a piston working air tight and free of friction is placed, it being drawn to the top end of the cylinder, admitting air in below by an aperture—after closing the aperture the piston is loaded with one atmosphere, or about 15 lbs., it will move downward until within 24 inches of the bottom when it will come to a stand; having compressed the atmosphere in the cylinder into one half its former space. If we then add an additional weight of 15 lbs., the piston will again move downward to within twelve inches of the bottom, where it will again be brought to rest; having by adding a double weight compressed the atmosphere, into one half its last named volume. If we next double the last named weight, which will be 60 lbs., the piston will again move downwards, until within six inches of the bottom, where it will remain stationary; having compressed the air into one half its last named volume. If we now reverse the experiment by removing one half of the weight of the piston, which is 30 lbs., it will instantly rise to a point 12 inches distant from the bottom. If another one half, which is 15 lbs., be removed, it will rise to a point 24 inches distant from the bottom. If we finally remove the remaining 15 lbs., the piston will ascend to the top of the cylinder again. This law of compression and expansion, is applicable to steam boilers; because steam follows the same law of compression and expansion of atmospheric air.

Steam boiler explosions in many instances present a scene of much greater destruction than that resulting from gunpowder—yet such terrific consequences are attributed to simple steam pressure.

Let us compare the explosive force of gunpowder, with the expansive force of simple steam.

The explosive force of gunpowder is at least 16,000 lbs. per square inch. Dr. Ure estimates the explosive volume of gunpowder at more than two thousand, the explosive solid. According to this measurement its explosive force would be about 32,000 lbs. per square inch. But taking 16,000 lbs. as a safe estimate, and we have an explosive volume of 1025, its explosive solid—while simple steam at 500 lbs. per square inch pressure, will only yield 32 volumes, that is, it will occupy 32 volumes at the atmospheric pressure, instead of one volume at 500 lbs.—showing that steam at 500 lbs. pressure, will expand to 32 volumes, while gunpowder at the lowest calculation, will explode to 1024 volumes. One volume one-eighth inch of gunpowder if ignited in a tube (of proper temperature, say 590° Fahrenheit to prevent the rapid absorption of caloric from the exploded gas) will expand to a 128 inches; while that of steam at 500 lbs. under similar circumstances, will only expand to 4 inches. Now if this law be applied to steam (which it certainly is applicable to,) it will be seen at once, that the explosive distance of simple steam at 500 lbs. per inch pressure, in a 42 inch boiler, will not extend beyond a circumference of 63 inches from the shell, at which point it will be brought to an equilibrium in consequence of the atmosphere. This is the true law that governs the expansive property of simple steam; it expands if relieved from its confinement equally in all directions, until counteracted by atmospheric pressure.

Reason would ask, how can such limited steam expansion, (even at a pressure of 500 lbs. that will rupture, or cause leakings in a boiler 42 inches in diameter, and $\frac{1}{4}$ inch iron) project large fragments of exploded boilers

nearly one half a mile,* and, whole boilers, on a horizontal line, to the distance of 540 feet, through several tiers of flour barrels, or through several of the neighboring boats.†

Those who attribute steam boiler explosions to simple steam, will say that those boilers, and fragments of boilers, were thrown to such great distance, by the momentum acquired during the few feet of steam expansion—Such assumption will not bear investigation. The projection of bodies depend upon certain conditions of causes—that is, the force applied in combination with the distance, to the point of suspension, corresponding to weight, velocity, resistance, and degree of elevation, gives the exact range, or distance of projection.

It, however, does not require such mathematical calculations to ascertain, whether, the simple steam pressure that may be generated in an ordinary boiler, with a few feet of limited expansion, can project fragments of boilers, and even chimneys, nearly across the Ohio River; causing a locomotive (weighing twenty tons) to ascend up into the air some thirty feet, making a summerset in its ascent, at the same time passing through the roof of the shed under which it stood, and landing some sixty yards from the place of explosion.‡

As before intimated, all explosions of steam boilers are produced by explosive elements in the boiler, upon polar principles, (producing fulminating percussion,) where by the water, or some part of it, explode.

I assume that there exists in nature an ethereal element, of the highest mobility, which permeates and penetrates all simple substances, and occupies all space—even the perfect vacuum of the barometer. It is a cold, positive element—is the base of all heat and combustion—and when chemically compressed, evolves heat and light.

Heat, or caloric, is a negative element. Water stands negative to both. As water is negative, or chemically sympathetic, to caloric, it will absorb caloric; and, as caloric is chemically sympathetic to ether, it will absorb ether.

For example,—as the fire is urged, the water in the boiler absorbs the caloric, and the result would be one hundred per cent. of steam from a certain amount of caloric-absorbed, but for the ethereal element around the shell of the boiler, permeating and combining with the caloric, chemically changing the latter latent twenty-five to fifty per cent.

The more intensely the fire is urged the greater will be the charge of latent heat stored up in the water—consequently, when the water becomes charged with these two elements, an explosion of the latter follows, upon the same principle that an explosion occurs in the thunder cloud when it is positively charged with "electricity," LATENT HEAT.

All that is necessary to protect a steam boiler from explosion, is; to place proper conditions of polarity between these elements, as you would protect your house from lightning. But not by lightning rods—they would not protect a steam boiler. But it must be done by casing an iron boiler all over, except the fire surface, with sheet copper, with an air space between the outer shell of the boiler and the copper casing, as described in my Letters Patent.

The combination of these specific metals

* Redstone.

† Knoxville.

‡ The "IRK."

with the air space, does, by laws of chemical polar affinity, serve two important purposes. The copper casing, in this arrangement, is positive to the iron boiler, and being in contact with the external element, forms a repelling pole. The iron boiler is negative, and being in direct contact with the external elements constitutes an absorbing pole, and therefore prevents the combining of the explosive elements within the boiler by gradually developing the latent heat in the water. A result which is shown by the fact, that, with this arrangement applied, the same quantity of steam will be generated with 25 to 40 per cent. less fuel, than without it.

That water may be exploded in the laboratory under certain conditions, chemists will admit; they will also admit that there exists a chemical affinity between certain materials, which must exist upon the principle of polarity; and why not admit this principle is a universal law of nature, which it evidently is. It will be further admitted that there are certain conditions, substances in the atmosphere, (such as the odoriferous principles of plants, the miasmata of marshes, and other matters of contagion, the presence, although sufficiently obvious, to the sense of smell, or by their effect upon the human constitution,) that can not be detected by chemical tests. Then may it not be, that there exists in the atmosphere other substances, that have heretofore been equally beyond chemical detection? And if such be the case, may it not be consistent with nature, that there are substances in the atmosphere, that will upon polar principles, penetrate a steam boiler, and unite with the water under a certain state of ebullition, and form an explosive compound? Scientific men should ponder, before deciding on the subject before us! We have said that water may be exploded in a laboratory; it may also be done without entering a laboratory; it is done in numerous instances in the blacksmith shop upon the anvil. It is a usual practice among blacksmiths, to dip the hammer into water, dropping it on the anvil, and holding a red hot iron nearly in contact with it and giving it a blow with the hammer, which instantly develops the latent caloric of the water when detonation, or explosion, with a loud report ensues. Water may also be exploded in a common pail by pouring into it certain quantities of fused metal. If, then, water can be exploded under various circumstances, which must be admitted by practical men, is it irrational to admit that it may be exploded in a steam boiler, if impregnated with a penetrable element combined with latent caloric, which is set free by the contraction of polar conditions? If water is thus exploded, no one can doubt the terrific result: a magazine of gunpowder would not exceed it. And there is no safety, for the water in a steam boiler under fourteen pounds per inch pressure, may as well explode as that under five hundred pounds. Whenever the engineer finds, (as he thinks,) that the water is too rapidly sinking below the gauges, he may be assured that it is assuming a spheroid state, in which case he should instantly warn all those within the reach of danger to retreat, as the event of an explosion is rapidly approaching, unless counteracted by its natural preventive.

In order to ascertain by actual experiments, whether the cause and preventive of steam boiler explosions, (as before stated,) have a foundation in the true science of nature, a series of well directed experiments were made accordingly. These experiments have been repeated from time to time, during a long

and tedious series, and have been entirely satisfactory.

Several of these experiments will be given in detail, to show how they harmonize with the true cause and preventive of steam boiler explosions.

The locality selected for these experiments was about one mile south-east of Dayton on the limestone strata, in a ravine about ten feet below the adjacent ground, and on a level with the limestone strata. This locality was selected purposely, as it was thought, if there are any elements in an æriform state that will penetrate and combine with the water in a steam boiler, that a locality of such description would likely be well adapted for experimenting.

For experimenting, a number of cylindrical boilers were made, 12 inches in length, and 8 inches in diameter—the iron in the shell being made of charcoal manufacture, .02 of inch thick. These boilers were constructed so as to give the joints more strength than usual. Each boiler thus prepared was furnished with a safety valve of a certain area in order to indicate the exact internal steam pressure.

The furnace being constructed of stones, weighing from 100 to 150 lbs each, and laid up in a temporary manner. The frame upon which the boiler rested, was made of bar iron $\frac{3}{4}$ by $1\frac{1}{2}$ inches, and of such length as to form a frame $7\frac{1}{2}$ by 13 inches—the corners being fastened together by $\frac{1}{2}$ inch bolts. The iron frame was placed on the stone furnace—the boiler was placed within the iron frame, which was constructed so as to receive nearly half its diameter. The safety valve adjusting apparatus, was fastened on the top of the boiler; from it extended a thin wire to the distance of 150 feet, where it was attached to a spiral spring scales, for the purpose of accurately weighing the steam pressure. A heavy fencing rail was laid across the boiler, to keep it to its place while the wire was drawn to force down the safety valve, which had a tendency to draw the boiler out of the furnace. All things thus adjusted, the copper covering was placed over the boiler, the latter was half filled with water—the fire was then urged until the pressure indicated 250 lbs. per square inch—in which case the heads were forced outward like an air bubble, against the cross bars of the iron frame, rupturing the joints, causing leakages that gradually relieving the boiler of high pressure. The boiler was removed, and repaired, and the second, third, fourth, and fifth trials resulted in similar ruptures. This boiler having been repaired in many places, was laid aside and a new one substituted. To prevent the bulging of the heads, (as before stated,) two pieces of iron $1\frac{1}{2}$ inch square, and $\frac{3}{4}$ inch thick were placed between each head of the boiler, and the cross bars of the iron frame.

The fire was replenished from time to time, until the steam attained a pressure of 250 lbs. per inch, when the furnace was once more filled with fuel; after the lapse of a few minutes the safety valve indicated 280 lbs. per inch pressure.* At this great pressure, which was 14000 lbs. against each head, no rupture ensued, but, the joints being overcome by excessive pressure, gave vent, which relieved the boiler of 30 lbs. per inch pressure, and when thus reduced to 250 lbs., leakages ceased, and the fire was extinguished, and the steam blown off by the safety valve. The

* 280 lbs. pressure in the above boiler, would be equal to 700 lbs. per square inch in a boiler 40 inches in diameter; and is 56000 lbs. per inch section, and is as much as the best of iron will bear.

same boiler, after being half filled with water, was put on the furnace as before—with this difference, however, the (safety cover) was removed. The furnace in this experiment was only once filled with fuel, as it was thought highly dangerous to attempt to replenish it while the copper cover was removed. The safety valve was adjusted so as to require 250 lbs. per inch pressure to lift it. The steam pressure gradually increased to 225 lbs. per inch, when it became stationary, in consequence of the fuel being exhausted. After a few minutes, the safety-valve indicated a steam pressure of only 190 lbs. being an unusual rapid decrease of pressure, indicating that a contraction of the elements within the boiler, was in progress, which I anticipated would result in an explosion. I accordingly prepared to take every observation possible, being 200 feet from the boiler. In a few moments, a most terrific explosion occurred; the stone furnace was broken into pieces and scattered over the ground some fifty feet around—two stones, left whole, weighing respectively 90 and 95 lbs. were carried six feet from their position—the chimney which was a 6 inch stove-pipe, and 3 feet in length was crisped, and carried into the air as high as a tall hickory tree, that stood near by, and fell over 100 feet from the explosion. The rail that was laid across the boiler, was broken into three pieces, the end pieces were projected on a horizontal line, a distance of 30 feet—the middle piece 4 feet long and weighing 16 lbs. was projected from appearance about 50 ft. high, and was found 82 feet from the explosion—the ground was covered with fragments of stone, iron, boards, and wood, (which were used about the furnace,) for 200 feet around—the boiler, which was rent by angular fractures, and flattened out, was carried some 20 feet—the sides of the iron furnace frame, which were of iron, one-eighth inch thick and six inches wide, were rent and curled up like leather, and carried 30 feet—one head of the boiler was found 73 feet, and the other 75 feet from the explosion—the front furnace bar $\frac{3}{4}$ by $1\frac{1}{2}$ inches and 10 inches long, weighing 4 lbs., was torn from the bolts and projected 156 feet.

This explosion was one of extraordinary character, and proves several important points, beyond all controversy.

1st. The exploded volume, which was at the instant of the explosion distinctly seen, to be that of a sphere; its dimensions being calculated from the range of certain conspicuous objects, placed at each side of the furnace for that purpose—and after making all reasonable allowances, it was ascertained that the exploded volume was at least 15 feet in diameter, making 10366 volumes, that of the steam space in the boiler, which was 300 cubic inches. If such had been simple steam at 190 lbs. per inch, (which the scales indicated,) and instantly relieved from his confinement, it would have expanded to a sphere of only 21 inches in diameter—and to 16 volumes its former confined state. But instead of the latter law of simple steam expansion, from 1 to 16 volumes, we see that the explosion was from 1 to 10366 volumes—a great difference, indeed, but, not more than is necessary to produce such a violent explosion.

2d. The water did explode—this is evident, from the fact that no appearance of any was discovered immediately after the explosion, either on the ground, or projected pieces of boards, wood, and rails, that lay near, at the time of the explosion. Another evidence that the water exploded, is that the heads of the boiler were driven outward below the water

level, with great violence, at the instant of the explosion. The heads bear positive evidence, (sufficient to convince any rational man,)* from certain breaks left in the metal in the act of projection out of the iron furnace frame, that the explosion was developed in the boiler below the water level.

3d. The explosion was forward,† from the fact that the boiler shell, boiler heads, iron furnace frame, most of the stone furnace, and connected with the boiler was projected forward, with the exception of the chimney. A regular expansive force, such as the elasticity of steam, or atmosphere, does act equally in all directions; it will not project the aft head of a boiler forward.

If such were the character of steam, it could not be relied on as a motive power, for it might with the same propriety act only in one direction in a working cylinder; and that direction might, per chance, be in the direction of the cylinder head, without making any impression in the direction of the piston head.‡

4th It will be remembered that this boiler was set into a strong iron frame, with a piece of iron $1\frac{1}{2}$ inches square, and $\frac{3}{4}$ thick, placed tight between the cross bars of the iron frame and the center of the boiler heads, in order to keep the boiler heads from bulging with the high pressure; in the explosion, the percussion was so great on the heads, as to force the lower part of the iron blocks through the boiler heads, causing a square break of 1 inch in the aft head, and one of $2\frac{1}{2}$ inches in the front head—the metal in the head was .09 of an inch thick. Now how much power was necessary to force those iron blocks through the heads as above stated? This can be answered on the principle of punching—it requires about 1200 lbs. pressure on a $\frac{3}{4}$ inch punch, to punch iron sheets the thickness of those heads—and a $2\frac{1}{2}$ inch break is equal to more than a $\frac{3}{4}$ inch punch. At the instant before the explosion, the internal steam pressure against the heads, was but 9500 lbs., lacking 2500 lbs., of the requisite pressure, to force those blocks through the heads, even if the pressure exerted against the entire surface of the head, were brought to bear upon that point, which was not the case, however, from a close examination of the break, in connection with experiments causing similar breaks, it is evident that in the above case, the whole pressure of at least 12000 lbs. must necessarily have been brought closely along the edge of the break, not extending to an area of more than $\frac{1}{2}$ a square inch. For example, if a plate of iron 8 inches in diameter and .09 of an inch thick be laid upon a block of iron $1\frac{1}{2}$ inch square, and an atmosphere or hydrostatic pressure is brought to bear upon its surface, for the purpose of pressing a hole through it, none of such pressure will be of any service, only that which is directly over the sides of the iron block, the balance will only have a tendency to bend the plate.

Again, if it were simple steam pressure, that caused those square breaks in the boiler heads, why not cause them when two hours before with the same boiler, the steam pressure was 280 lbs. per inch, equal to 14000 lbs. against the heads—this whole pressure against the heads was resting against those square blocks of iron. Again, why did it not explode

at 280 lbs.?* Every circumstance connected with this explosion proves clearly, that a combination of explosive elements occurred.

And in no case, in many experiments, did an explosion occur when the safety cover was attached, though in all cases, the pressure was finally increased until the boilers ruptured at the weakest point, which relieved them of excessive pressure, without doing any further damage.

I am positive that steam boilers with the copper casing properly applied, can not explode under any pressure, or other treatment that steam boilers are subjected to.

Respectfully, etc.,

JACOB HARSHMAN.

Dayton, May, 1859.

PARTICULARS OF PROPOSITION TO LEASE NEW YORK AND ERIE RAILROAD.

The New York Herald, of the 29th, contains the following inference to the proposition to lease the New York and Erie Railroad:

We understand that a proposition to lease the Erie Road was submitted to-day to the Executive Committee of the Board of Management. The party applying for such lease is represented to be a practical one in railroad affairs, and responsible, by themselves and their sureties, for the good care and efficiency of the road-way and its equipment, and for the annual rent, as follows:

Year.	Rent.	Equal to 7 ¢ cent. on
1-60.....	\$1,500,000	\$21,400,000
1-61.....	1,600,000	22,500,000
1-62.....	1,700,000	23,600,000
1-63.....	1,800,000	24,700,000
1-64.....	1,900,000	25,800,000
1-65.....	2,000,000	26,900,000
1-66.....	2,100,000	28,000,000
1-67.....	2,200,000	29,100,000
1-68.....	2,300,000	30,200,000
1-69.....	2,400,000	31,300,000

With the privilege, as we learn, of a renewal of the lease for ten years more at the fixed rental of \$2,500,000 a year, equal to 7 per cent. on \$34,300,000, about the original construction cost of the work. The mortgages of the company, first, second, third and fourth—the last not yet all negotiated or exchanged for common bonds—stand in \$19,000,000, counting the fourth mortgage fully issued.

First Mortgage, due 1868.....	\$3,000,000
Second Mortgage, due 1859.....	4,000,000
Third Mortgage, due 1863.....	6,000,000
Fourth Mortgage, due 1880.....	6,000,000

Total Mortgage.....	\$19,000,000
Common Bonds.....	\$11,850,000
Less in Sinking Fund.....	1,402,000

Less in Fourth Mortgage.....	3,000,000—	7,389,000
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Total 7 per cent. Funded Debt.....	\$6,387,000
Floating Debt, last report.....	1,767,000
Fourth Mortgage on hand, \$2,980,000, fifty per cent. cash.....	1,490,000

Balance unprovided for.....	\$217,000
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If the foregoing proposition for a lease should be accepted, the whole mortgage interest would be secured from the start, together with the interest on the common bonds as follows:

1860.....	\$2,400,000
1861.....	3,850,000
1862.....	5,300,000
1863.....	6,750,000
And in 1864 and thereafter, in full....	7,389,000

* Such is often the case, that boilers explode most violently, while the steam gauge indicates less pressure than the boilers bore on former occasions; this proves that they explode by a cause aside from steam pressure.

No income would accrue to the capital stock of 11,000,000 until after 1864, when it would be equal to two per cent a year on the par value until 1869, and thereafter about six per cent. per annum. We give the foregoing particulars of the proposition and its probable future bearing upon the interest of the bond and stockholders, without reference to the probabilities of its acceptance.

We are even ignorant of the names of the party proposing to lease the road for this long term, and we presume that few persons interested as creditors or stockholders are prepared, without considerable reflection, to say that great corporation like this must necessarily alienate their property for ten or twenty years merely to get rid of a bad administration which a general vote of the proprietary may at any annual election displace.

The Herald of the same date says:

We presume that the proposal to lease the Erie Railroad, which was mentioned in this column this morning, will not meet with favor from the company. It seems difficult to understand how the company can make any arrangement making over the control of the road to other parties, without providing for the interest on all the bonds. Nor are we shown what is to protect the lessees from ejection in the event of suits being brought against the property on overdue coupons.—The stockholders, who now control the property, have still less reason to lease the road on the terms proposed. As matters stand, there is a possibility that the revival of business may enable the road to pay all its interest, and a trifle on the stock. The proposed arrangement would practically wipe the stock out of existence for the present. By what means the proposed lessees intend to satisfy the company that the road would be kept in repair during their lease, we are not informed. It is difficult to conceive any bargain on this point which would not be certain to lead to litigation. We have expressed the opinion more than once that the only course for the Erie Company, if they can not gain delay from their creditors, is to let the law take its course, and to reorganize the property on a new basis; any make-shifts in the shape of leases will be likely to render the final end more injurious to all parties concerned.

ILLINOIS RIVER RAILROAD.

This road is to extend from Pekin, Tazewell county, to Jacksonville, Morgan county, a distance of seventy-three miles. It passes through the counties of Tazewell, Mason, Cass and Morgan, which are well known to be unexcelled as an agricultural district. It will connect, two miles west of Pekin, with the Peoria and Hannibal road now in process of construction, and thence to Chicago via the Bureau Valley and the Chicago and Rock Island roads.

All the iron necessary for this road was purchased, some time since, in England, and 6,500 tons of it have been shipped to New York. By the 1st of July 5,000 tons will have been shipped from New York to Chicago. Six cargoes of rails, chairs and spikes, making over 2,000 tons, have already arrived here, and several other cargoes are daily expected. Over 500 tons of rails and a portion of chairs and spikes have gone forward to the line of the road, and shipments will be continued rapidly. Arrangements have been made for sending forward in a few days two locomotives and the necessary cars for track-laying from two points, which will be commenced early next month and prosecuted vigorously to com-

* These fractures are preserved, and may be seen with the marks referred to.

† This is often the case in steam boiler explosions, that the force of the explosion is forward, aft, upward, downward, or sideways.

‡ A solution of this is found in the treatment of solar principles.

pletion. The road-bed between Pekin and Virginia, Cass county, fifty-eight miles, is completed with the exception of about three miles of light work which will be finished by the time the track-layers reach it.

It is aimed to have the road completed to Virginia by the 1st of October next, and to Jacksonville by the 1st of January, 1860. This will be early enough to reap the benefit of carrying this season's crops to market.—These, especially wheat and corn, along the line of the road, promise a full average yield, and they will mostly find their market at Chicago. Cass county alone, though containing less than 400 square miles, annually exports 30,000 hogs, several thousand head of fat cattle, besides a large amount of grain. Morgan county exports annually about 75,000 hogs, from 16,000 to 18,000 fat cattle, and a large amount of grain. Mason and Tazewell counties export largely of all these products—especially of wheat and corn. We congratulate the business men of Chicago, on the favorable prospects of the speedy opening of a line of road from which they will derive a large and profitable trade. The energy and enterprise of those who have pushed it forward in the face of the monetary revulsion are worthy of all praise.—*Enquirer*.

LEASE OF THE ERIE RAILROAD.

MR. CHARLES MINOT, formerly Superintendent of this road, having associated several gentlemen with him, has submitted to the company a proposition for a lease of this road for a period of 10 years, agreeing to pay \$1,500,000 the first year, \$1,600,000 the second, \$1,700,000 the third, \$1,800,000 the fourth, \$1,900,000 the fifth, and 2,000,000 the remaining five of the ten years, with privilege of a renewal of the lease for an additional ten years, at \$2,500,000 per annum.

The proposed lessees act upon the idea that there is an ample margin for profit in the saving to be effected out of what it would cost the company to carry on the road. This is reasonable. They propose to divide among six or eight competent parties the different departments of services, and by interesting their subordinates in the result, to secure the most efficient co-operation of all employed. In this way they expect to be able to operate the road at a much less rate than it be done by the company.

We do not see how a great road like the Erie can be successfully conducted in any other manner. There are, in ordinary times, employed upon it, five or six thousand men. Every soul of this great army has his compensation measured by a regular salary, graduated according to the supposed dignity, or responsibility, of his duties. All of a similar grade receive very nearly the same rate of compensation, although some of the parties instead of being valuable officers, may possess no qualifications whatever for their duties, but may be the cause of great loss to the company. The ultimate rule of conduct of each subordinate is the will of the chief executive. With the widest training and experience he can hardly be expected to infuse his own intelligence and energy into those under him, nor exact from them a proper degree of accountability. But if he be entirely inexperienced in their duties, they have no other rule of conduct than their wills. It is easy to see that such a relationship will end in a complete demoralization of the whole operating force.

To remedy such evils a new principle must be introduced into the management of our roads. An inducement must be held out to every person occupying a responsible position, sufficient to make him, at all times, vigilant and faithful, and qualify himself for the discharge of his duties in the best manner possible. The amount of his compensation must be made to depend upon the amount he can save to, or make for, the company. The strongest motive that can be presented to

man, is always before him. As a person would be compensated in proportion to his qualifications, the most competent would soon work their way to the most important stations, and the best talent in the country always be found in the management of our roads.

As it is, qualifications have now nothing to do with appointments to office. Presidents and Superintendents are often selected who have never seen an hour of service. These, after trying their hand at their duties, and failing of success, give way to others as incapable as themselves. In this way are our roads constantly shifting their managers, and constantly becoming less and less productive, till one after another is wound up under some one of its mortgages.

Such will be the fate of the Erie unless an entire change of system is inaugurated. We hope, therefore, that the proposition of Mr. Minot, will receive careful attention, and that it, or one of a similar character, will receive the assent of the company.—*American Railroad Journal*.

THE NEW SCHEME OF THE MANAGERS OF THE PITTSBURGH, FORT WAYNE & CHICAGO CO.

The N. Y. *Tribune*, of Friday, has the following explanation of the telegraphic announcement in relation to this matter:

The Board of Directors of the Pittsburgh, Fort Wayne and Chicago Railroad Company have issued, through their President, J. Edgar Thompson, a Circular, addressed to the bondholders of the Ohio & Pennsylvania, Ohio & Indiana, Fort Wayne & Chicago, which companies originally formed its line prior to consolidation, asking them to fund the coupons falling due for eighteen months commencing July 1, 1859, in a two per cent. sinking fund, payable in five years, as was done on a former occasion, as follows:

Coupons due July 1, 1859, and Jan. 1 and July 1, 1860, of Mortgage Bonds of Ohio and Pennsylvania, and Fort Wayne and Chicago Railroad Companies.

Coupons due Aug. 1, 1859, and Feb. 1 and Aug. 1, 1860, of First Mortgage Bonds of Ohio and Indiana Railroad Company.

Coupons due Sept. 1, 1859, and March 1 and Sept. 1, 1860, of Third Mortgage Bonds of Ohio and Indiana R. R. Company.

Coupons due Oct. 1, 1859, and April 1 and Oct. 1, 1860, of Income or Second Mortgage Bonds of Ohio and Pennsylvania Railroad Company, of Second Mortgage Bonds of Ohio and Indiana Railroad Company, and Real Estate Mortgage Bonds of Fort Wayne & Chicago Railroad Company. The aggregate amount proposed to be funded being \$722,925.

Mr. Thompson, in his circular, gives sound reasons; growing out of the great falling off in the business of the last year and other operating causes, why the same can not now be met; but he apparently shows good ground for believing that the proposed extension of 18 months on the debt will relieve the Company from its old floating debt, and place it financially on a sound basis. The bondholders are to retain all the security they now have under their several mortgages, will get 10 per cent. for the money thus loaned to the Company, while the benefit conferred by the extension of time on the coupons for a year and a half will be a full equivalent to the Company for the interest they pay. The Directors have resolved to pay promptly, so far as the resources of the Company will admit, all interest and Sinking Fund, maturing July 1st, next, and thereafter on the ten per cent. Sinking Fund Bonds, and on the General Mortgage

Construction Bonds of the issue dated January 1st, 1857.

The circular of the President says:

It has heretofore been estimated that the net income of the road for 1859 would be \$920,000. Thus far the business of the year gives no promise of that result. A net revenue for the year of from \$700,000 to \$800,000 will be the utmost that can be hoped for, from the present prospect of trade. Of that income, at least \$300,000 have already been expended, or anticipated, and it will require about \$45,000 more of it to be anticipated to pay what of the interest and sinking fund due on 1st July it is proposed to pay.

It is believed that a net income of at least \$1,000,000 in 1860 may be relied on.

The entire funded debt of the company on 1st January, 1859, was \$9,029,765, including \$576,765 of 10 per cent. Sinking Fund Bonds, issued to fund Coupons. The present funded debt may be stated at \$9,200,000, entailing an annual charge of interest and Sinking Fund for 1859 of about \$800,000, to be increased in 1860, with the increase of funded debt and obligations for Sinking Fund, to probably \$900,000, and to a larger amount if a majority of the floating debt is funded.

The entire floating debt, as shown by the Auditor on June 1st inst., is.....\$2,039,997 39
Against which are shown assets amounting to.....213,388 79

Leaving a balance of.....\$1,823,658 69
In this amount is included the debt of the Pennsylvania Railroad Company, for iron furnished to complete the Road to Chicago, in 1858, and not before stated in the amount of floating debt, viz.....483,731 02

Leaving of floating debt, beside the debt to Pennsylvania R. R. Co., for iron.....\$1,339,927 67

Of the issue of \$3,500,000 of Construction Bonds, the Company still owns \$2,270,000—there having been sold \$1,230,000. It also owns \$50,000 in amount of Real Estate Bonds.

Of the Bonds unsold, \$2,024,000 of Construction Bonds, and the \$50,000 of Real Estate Bonds, are held as collateral security out of the Company's possession, \$1,109,000 being in possession of the Pennsylvania Railroad Company as security for the iron debt and cash advances.

In this \$2,270,000 of Construction Bonds and \$50,000 of Real Estate Bonds, rest the main hope of relief from the floating debt.—The Bonds, if disposed of at their value, are adequate to the purpose, and their protection for that purpose creates the inevitable necessity of using some part of the net income of the road; until the credit of the Company can be so restored as to make a market of the Bonds. The want of that market has hitherto prevented the funding of the floating debt.

By the funding of the Coupons, as proposed, the Company gains the use, during the next five years, of \$722,925, at the semi-annual interest at the rate of 10 per cent. per annum, and the monthly Sinking Fund to be paid.

As an equivalent for this loan from the bondholders, it is proposed to advance the price of the Construction Bonds, to all unsecured holders of the floating debt, to par.

With the cordial co-operation of the bondholders, and other creditors, in the plan now proposed, it is believed that before the close of 1860, the Company can be extricated from all its financial difficulties. It is to be regretted that the extension now asked for was not embraced in the funding arrangement of 1858. The necessity of it was then unforeseen.

☞ The earnings of the Ohio and Mississippi RR. are a considerable increase over June, 1858,

LOUISVILLE & PORTLAND CANAL COMMITTEES.

On Tuesday morning, the committees appointed by citizens of Cincinnati and Madison to visit Louisville, and examine and report on the best means to be adopted to improve the navigation of the Ohio river at the Falls, reached this city. At 9 o'clock, A. M., they were met at the counting house of Messrs. H. D. Newcomb & Bro., by the Louisville Committee, and other citizens interested in the object that caused the visit of the other Committees to Louisville. The following is a correct list of the Committees from Cincinnati and Madison:

W. Hooper, Lewis Whiteman, Edward Dexter, Thomas Sherlock, Samuel Davis, Jr., Richard Smith, Wm. Gledin, Capt. Williamson, W. W. Scarborough and Hon. J. W. Gurley, Cincinnati. J. S. Neal, A. F. Temple, F. Burke and Hon. McKee Dunn, Madison.

The meeting of the several Committees was then organized by the appointment of Mr. W. Hooper, of Cincinnati, Chairman, and Mr. T. Sherlock, of Cincinnati, Secretary.

At the request of the meeting, the Directory of the Louisville and Portland Canal Company attended, and gave a full and satisfactory explanation of the financial and other affairs of the Company.

The following resolutions were proposed and unanimously adopted, viz:

Resolved, That a Committee of five be appointed by this meeting to prepare a brief history of the Louisville and Portland Canal, with a statement of its present financial condition, with such suggestions as to the enlargement of said Canal as said Committee may deem proper.

Resolved, That a Committee be appointed to report all the legislation of the Commonwealth of Kentucky, and of the Congress of the United States, with reference to the Louisville and Portland Canal, and the opinion of said Committee as to the power of the Board of Directors of said Canal Company to apply the revenues and credits of the Canal to its enlargement and improvement.

The meeting then adjourned for the purpose of examining the canal, and the routes surveyed for canals on the Indiana shore of the river.

At three o'clock, P. M., the Cincinnati and Madison Committees were met by a number of the Louisville Committee, by the Superintendent and a portion of the Directors of the Canal Company, and other citizens of Louisville and Jeffersonville, and visited the canal, passing along its entire length, examined the locks and bridges, and the proposed location of the branch canal and new locks near the foot of Sandy Island. The party then crossed the river, and examined the location of the different routes surveyed on the north side of the river for a canal, and satisfied themselves fully in regard to them, and at a late hour returned to the city.

On yesterday morning, at 8½ o'clock, the Committee again met at the counting room of Newcomb & Bro.—the Committee from Jeffersonville being present—and after some discussion, and a free conference on the matters under consideration, the following preamble and resolutions were offered and unanimously adopted:

The Committee appointed by the citizens of Cincinnati, Madison and Louisville, after a full examination of the surveys for a canal around the Falls of the Ohio, and a personal inspection of the routes on both sides of the river, have satisfied themselves that, under

present circumstances, the enlargement of the present Louisville and Portland Canal, with a branch entering the river below the rocks near the foot of Sandy Island, would be the most readily accomplished, the most feasible, and the least expensive plan of improving the navigation of the Ohio river at the falls.

To accomplish this work, they recommend that a memorial to Congress be proposed, embracing the following petitions:

1st. That an appropriation be made of sufficient sum to complete the improvement above referred to—or

2d. That Congress authorize the Board of Directors of said Louisville and Portland Canal Company to use the revenues and credits of said Company to make the said improvements.

Resolved, That in the opinion of this meeting, the canal should be of sufficient capacity to pass steamboats 400 feet in length and 85 in width.

The Committee then adjourned. The members of the Cincinnati and Madison Committees expressed themselves highly pleased with the manner in which they had been received by the citizens and Committee of this city, and especially at the full and satisfactory information in reference to the condition of the Canal Company, financially and otherwise, so promptly and frankly furnished by the Directors and officers of the Company. The Committees from our sister cities left for their homes, yesterday, on the mail boat, with the hearty good wishes of our entire community.

This visit of the Madison and Cincinnati Committees can not fail to be productive of good results. The people of those cities can now have their minds disabused of the false impressions produced on them for years, by the maneuvering of unprincipled speculators and jobbers, who have, for the gratification of their own selfish purposes, labored to prevent the improvement of the canal, and to involve the Government in the expenditure of an immense sum which could have only resulted in putting money in the pockets of a few individual schemers and wire workers, without in any way benefitting the commerce of the West. They will also be now convinced that the people of Louisville, so far from being averse to the improvement, have always favored it, and that the real cause of the great delay in liberating the commerce of the river from the restrictions and burdens imposed on it by the insufficiency of the canal, is to be attributed, mainly, to parties in their own midst.

It is gratifying to us to think that our exertions to attract public attention to this matter have been successful, and, as occasion may require in the future, we shall continue to press the importance of the improvement until it is finally effected. The public are greatly indebted to the bold and fearless manner in which the Cincinnati *Commercial* has advocated this measure, for the present success, and, no doubt, it will continue to urge the claims of the enterprise, until they are fully recognized by all, and the means furnished by Congress to do the work, and make the navigation of the Ohio free.—*Louisville Courier*, 30th.

TUNNEL RAILROAD COMPANY.—At a special meeting of the Company, on Tuesday of this week, the resignation of A. S. Winslow, Chas. Reemelin, and John W. Coleman, were received, and Samuel H. Goodin and Jamees Goodin were elected to fill two of the vacancies so occasioned. The other vacancy has not been filled.

TEXAS RAILROADS.—The *Houston Commercial Telegraph*, in speaking of the roads centering in that city, says:

"But of railroads, we have, as usual, pleasing news. Progress marks all the enterprises, and the amount of work now being done is very great. The Galveston Bay Bridge is getting along very well. Cars make daily trips from Virginia point to Houston. Whether this road will be pushed on further by the present owners is not known. If they do not make some progress soon, an application will be made by the citizens of Houston for a new charter into Eastern Texas, and if our merchants take hold of the road, as they are anxious to have a chance to do, it will be built without further delay. They have shown what they can do, and are now ready to push out their iron arms into the rich East, and bend that part of this great State to the emporium of trade which they have built up here. The bridge across the Brazos on the B. B. & C. Road, is nearly, if not quite completed, and the two sections of the road connected as before. The Brazoria road is now completed thirty miles from this point, and all the iron is received to finish it to Columbia. Work west of the Brazos is progressing quite satisfactorily. The W. C. R. R. is now done eleven miles, and efforts are being made to raise money to build the bridge across the Brazos river. We trust they may be successful. The Central Road is completed sixty-five miles, and will be ten miles further by the 1st of August. The company is grading on ahead on the Adams contract, that having been surrounded on account of the dissatisfaction created by it among some members of the company. Of the New Orleans road, we only know that a large force is at work at the eastern extremity of the Texas portion of the road, pushing it Westwardly as fast as possible. There are now over 200 miles of completed road on the lines connecting with Houston. On the whole the railroad spirit was never more progressive than now."

J. EDGAR THOMPSON AND THE SOUTHERN PACIFIC RAILROAD OF TEXAS.—We find in a late St. Louis paper the following letter from J. Edgar Thompson, President of the Pennsylvania Railroad Company:

"OFFICE PENNSYLVANIA R. R. CO.
Philadelphia, June 13, 1859."

"DEAR SIR:—Referring to our conversation at the St. Nicholas Hotel, New York, I can state that I will accept (on the conditions then named) the Presidency of the Southern Pacific Railroad Company, upon the fulfillment of the following conditions:

"First—That the company will be freed from all its existing debts.

"Second—That all questions between the authorities of Texas and the Company, involving its legal or corporate rights, shall be satisfactorily settled.

"Third—That additional share capital, amounting to at least two hundred and fifty thousand dollars, in addition to the sum required to meet all of the liabilities of the company, shall be obtained in cash.

"Yours, very truly,

"J. EDGAR THOMPSON."

"J. FOWLKES, M. D., President."

SOUTHERN PACIFIC RAILROAD.—The New York *Herald* contains the appended letter from Mr. Wilson, a lawyer of eminence in Texas, to Dr. Fowlkes, President of the com-

pany; from which it will be seen that the State suit is virtually settled:

MARSHALL, June 13, 1859

DR. JEPHIA FOWLEES: *Dear Sir*—Granyville Lewis has just arrived from Tyler, and brings word that the State suit has been reversed and remanded. All the points save two have been decided in favor of the company. It is decided that the notice on the director, Scott, is insufficient, and that the meetings held out of the State were good; but the District Attorney had the right to bring the suit, and that the petition shows a cause of forfeiture in this, that the company had not their office here on the 19th of June. The petition shows this, and the demurrer admits it. This is the only point on the merits decided in favor of the State, and you well know we have nothing to fear on this question. I think Clough will dismiss the suit—I have just had a conversation with him—but whether he will or not, we need have no fears as to the ultimate decision of the case. It is now virtually decided in favor of the road. Everything here is moving on right. The whole country is with us. I fear the mail will close, and must stop. Your friend,

S. H. WILSON

THE ROCK ISLAND BRIDGE.—This structure has now been thoroughly repaired, and we learn that a train of thirteen cars loaded with stock, passed over it Saturday.

A party of lake captains and pilots from this city are now at Rock Island for the purpose of examining the Bridge. They took a steamer, we are told by a Davenport paper, and passed up and down the river, through the "draw," carefully noting the effect of the current, back water, &c., upon the safety of the boat. Their testimony in any suit may and will be of great weight.

LANSING AND OWOSSO RAILROAD.—The construction of this road is being pushed forward with considerable energy. From Owosso to Langsburg, thirteen miles, (half the distance to Lansing,) the road-bed will be finished in a week. On the next six miles the trees are cut and the ground grubbed out, and several gangs are at work grading.—*Lansing (Mich.) Journal*, June 16.

The above road is known as the Amboy, Lansing and Traverse Bay Railroad, and is to run from Mackinac to the south line of the State, making a road of nearly three hundred miles, and the only one running to the capital of the State. The corporators have a valuable land grant.

A large number of citizens of Bureau County, Ill., have published a card cautioning the public against negotiating some bonds given by them to assist in the building of the Comanche, Albany and Mendota Railroad.

The election of Officers of the Buffalo and State Line Railroad Company, took place on Tuesday week, and resulted as follows:

President, George Palmer; *Vice President*, Dean Richmond. *Directors*—George Palmer, Dean Richmond, James S. Wadsworth, Joseph Field, Charles H. Lee, William Keep, Harrison White, John Wilkeson, H. F. Lansing, Alanson Robinson, George W. Patterson, Charles Moran, Daniel Drew. The Secretary and Treasurer were not elected, and the meeting adjourned till July 12th.

IMPORTANT RAILROAD DECISION.—The Buffalo *Courier* of the 2d has the following, which will be of interest to Railroad men generally:—

Decision in Respect to Railroad Tickets.—On the 12th of August, 1858, Benjamin Barker purchased of the Hudson River Railroad, in New York, a ticket from New York to Buffalo to ride over the Central Railroad, for which he paid \$5. On the day of the purchase he went to Albany, and remained there until the 19th of August. On the 19th he took the Central cars for Buffalo; rode as far as Syracuse; when called upon for his ticket or fare, he showed this ticket to Conductor Codin, which read as follows: "Good for one seat in first class from New York to Buffalo by Hudson River and New York Central Railroad—to be used within three days from date—good for a continuous trip only," properly signed and stamped.

The conductor informed him the ticket was not good and that he must pay his fare from Syracuse, and showed him his instructions compelling him (the conductor,) to exact the payment of fare in such cases, and in case of refusal to require him to leave the cars. Barker refused to pay his fare or leave the cars, and the conductor, in a gentlemanly way, put him off, using only the necessary force to accomplish the object of ejecting him from the cars.

Barker brought his action against the conductor for an assault and battery, and the case was brought on trial this week at the Cattaraugus Circuit, before Justice Richard P. Marvin of the Eighth District, and upon the facts above stated, the judge nonsuited the plaintiff, holding that the ticket evidenced the contract between the parties, that the Railroad Company had a right to prescribe their terms embraced in its condition, and that the conductor was justified in the course he took.

CONNECTICUT RAILROADS.—The following abstract from the report of the Railroad Commissioners of Connecticut, shows the cost of the railroads in the State, their length, etc.:

The chartered capital of the several railroads lying in this State, in whole or in part, is.....\$23,675,838 00
Of which there has been paid in.....18,727,367 31
The total amount of funded and floating debt is.....11,256,092 50
Making total apparent expenses chargeable to construction account.....29,993,459 81
The total length of road constructed under charter granted in whole or in part by this State, is.....miles 783
Of which is constructed in this State.....602
The aggregate length of double track is.....122
Making the entire length of track in use.....906
The total expenditure for working the road has been.....\$20,146,693 67
For fuel, oil, and waste.....326,917 06
For salaries, wages, etc., chargeable to passenger and freight departments, and miscellaneous expenses.....19,820,677 61

There has been expended during the past year—

For maintenance of way.....\$479,591 73
For maintenance of motive power and cars.....262,451 24
Making for repairs and renewals a total cost of.....742,042 97
The total income of the railroads in this State during the past year has been.....3,117,982 15
Their net earnings have been.....1,046,434 92
Their reported surplus is.....163,380 68
Passenger and other trains have been running in all.....miles 1,978,662
Carrying passengers.....2,572,516

The whole number of accidents to persons during the year was thirty-four, and of these twenty-one occurred to persons lying or walking upon the track.

MONETARY AND COMMERCIAL.

The semi-annual settlements of July created quite an active demand for money during the week past, but the bankers were disposed to meet the wants of their customers at the usual rates. The farmers being fully occupied in gathering their harvest, many merchants complain that country collections are unusually slack; for some little time to come, no doubt, the influx from this source will be limited. In the meantime, however, in the absence of any cause for speculation, the demand must be limited, and met with an abundant supply, until the opening of the fall trade.

The above remarks will apply with equal force to Exchange; the temporary pressure created by the July balancing and coupon payments, will give place to an easier state of the market, and rates feel the influence of accumulating supplies. Present quotations are:

BUYING.		SELLING.	
New York Sight.....	½ prem.	@ ½ prem.	
Boston.....	62 prem.	@ ½ prem.	
Philadelphia.....	62 prem.	@ ½ prem.	
Baltimore.....	50 @ 62 prem.	@ ½ prem.	
New Orleans.....	½ dis.	par.	
American Gold.....	½ prem.	½ prem.	

The marine losses for the month of June, according to careful estimates by some of our Underwriters, including losses on cargoes, are about TWO AND A HALF MILLIONS.

RECAPITULATION.		
	Vessels and Freight.	Cargoes.
Steamers.....	\$557,000	\$125,000
Ships.....	560,000	702,000
Barks.....	138,000	155,500
Brigs.....	62,000	34,500
Schooners.....	66,400	25,500
	\$1,413,400	\$1,042,500
	1,042,500	

Total.....\$2,455,900

The process of paying coupons on State Bonds is now going on. We are glad to say there will be no new default. Virginia, North Carolina, Missouri, Louisiana and Tennessee Six per Cent. Bonds will, probably, recover par, should there be more ease in the Money Market. Ohio, Kentucky, and Georgia Securities command a premium, so do the bonds of Maryland and Michigan. The current prices for Pennsylvania and Indiana Five per Cent. are equivalent to a premium for a Six per Cent. Stock. The finances of the States are gradually assuming a better condition.—Pennsylvania and Maryland are rapidly extinguishing their funded debt. Louisiana is prohibited from increasing her debt.—*Cour. and Enq. July 2.*

The monthly report of the Trustees of the Water Works, for June, was made to the City Council last night, viz:

Balance in City Treasury, June 1.....	\$16,294 76
Deposited by Collectors.....	9,874 95
by Secretary.....	350 00
	\$26,519 71
Orders drawn on Treasurer.....	22,955 78
Balance in Treasury July 1, 1859. ..	\$3,563 93
Balance in Office, June 1.....	\$361 89
Received from various sources.....	306 49
	\$668 08
Paid Returned Water Rents.....	\$109 25
Deposited by Secretary.....	350 00
Office expenses.....	5 05
	464 30
Balance in Office, July 1.....	\$203 78
Disbursements.....	\$22,955 78

The City Auditor's report for the week ending last night, makes the following exhibit of the condition of the City Treasury, viz:

EXPENDITURES.	
Watch Fund.....	\$3,886 80
Superior Court Fund.....	14 00
Fire Department.....	5,681 78
Police Court.....	556 27
City Prison Fund.....	187 46
General Fund.....	2,310 89
Special Ordinance.....	27 00
Common Schools.....	17,721 32
Colored Schools.....	1,203 61
Total.....	\$31,589 13

There is remaining in the City Treasury as follows:

General Fund.....	\$61,800 20
Watch Fund.....	5,177 89
Interest Fund.....	53 19
Superior Court.....	2,161 41
Fire Department.....	3,800 59
Light.....	2,863 76
Workhouse.....	4,249 03
Common School Fund.....	1,148 58
Colored School Fund.....	2,549 51
Total.....	\$83,813 24

THE ILLINOIS SOUTHERN R. R.—As indicated in our issue of last Friday, Vincennes has been selected as the terminus of the Illinois Southern Railroad, and St. Francisville has been designated as the point at which it is to cross the Wabash River. This, we have no doubt, will be acceptable to all of our citizens; indeed, we know of several influential gentlemen who were opposed to the idea of crossing at the rapids, that are now warmly in favor of the project, and will give strong material aid in furtherance of its completion.

The committee appointed to procure subscriptions are actively at work, and there can not be any question of their ability to secure the requisite amount to insure the completion of the Road to Vincennes. All that is required, is active, energetic exertion to raise the amount of subscriptions required.

We can assure those who are skeptical as to the completion of the road, and who are afraid that the city subscription will be jeopardized, that every precaution has been taken against a possibility of loss, and that not a cent will be required nor a cent paid, until a sufficient guarantee is given that the work will be carried through in good faith.

Thus much having been done, we hope the citizens of the town, as well as those who live in the lower prairie, will respond cheerfully and liberally to those who may call upon them for subscriptions.—*Vin. San.*

COAL TRAFFIC OF THE CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD.—An effort is being made by the management of this line to increase its coal traffic, and place the same upon such permanent basis in regard to time, tariff, etc., as shall encourage and develop the business to something nearer the capacity of the miners to furnish, and of the road to transport coal.

It is proposed, and with some prospect of success, to make such an arrangement with the Little Miami and Columbus and Xenia Companies as will enable the Cincinnati, Wilmington and Zanesville Co. to make a fixed rate of about \$18 75 per load between any of their coal stations and the City of Dayton. In Dayton coal from the district tributary to the Wilmington Road, commands 11½ cents, and this sum, after paying \$18 75 per car load for transportation, would net the miners 3½ cents per bushel, which is remunerative.

The following are the receipts of the Little Miami and Columbus and Xenia Railroad for the month of June as compared with the same month in 1858:

June, 1859.....	\$87,458 04
June, 1858.....	77,518 26
Increase.....	\$9,949 78

WOODRUFF'S PATENT SLEEPING CARS.

AS NOW RUNNING ON THE LAKE SHORE AND LITTLE MIAMI RAILROADS.

The attention of Railroads and Private Parties is respectfully called to this new and much desired improvement in Railroad Cars.

Any information that may be desired, can be obtained of the undersigned owners of the Patent.

T. T. WOODRUFF & CO.,
1714 Brown Street,
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AMERICAN AND FOREIGN PATENT AGENT,
THOMAS D. STEVSON,
SOLICITOR OF PATENTS,
And Consulting Engineer,
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Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL RAILROAD

AND PANA OR SANDOVAL

FOR

Decatur, Springfield,
Bloomington, Peoria,
Burlington, Quincy,
La Salle, Rock Island,
Dixon, Galena,
Prairie du Chien, St. Paul, and
St. Anthony.
And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANA for all the above points. Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line of

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,

Gen'l Southern Agent, Cincinnati.

W. P. JOHNSON,

Gen'l Passenger Agent, Chicago.

TO THE LADIES.



THE BOUDOIR

Double Thread Sewing Machine.

THE BEST AND CHEAPEST
Double-thread Sewing Machine ever
offered in the Cincinnati Market.

This Machine possesses advantages over any thing now in use.

Office in Melodeon Building, corner Fourth and Walnut, up stairs.

Agents Wanted in the West and South.

Send for Circular. Address,

W. E. Braman & Co.

June 21, 1859.

(Cincinnati, Hamilton and Dayton)



RAILROAD.

FOUR TRAINS

LEAVE THE SIXTH STREET DEPOT DAILY.

TRAINS RUN THROUGH TO RICHMOND, LIMA, SANDUSKY, AND DELAWARE WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND NORTH-WESTERN CITIES.

(Columbus time, which is seven minutes faster than Cincinnati.)

A. M. EXPRESS TRAIN—For Cleveland and Pittsburgh, via Delaware, makes close connection at Crestline for Pittsburg, Baltimore, Philadelphia and New York; and at Cleveland for Dunkirk, Buffalo, Boston and New York. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 7:20 P. M., Quincy and Galena at 7 A. M. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Muncie. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

S. A. M. MAIL TRAIN—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STEAMER FOR DETROIT; at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at Delaware with the C., C. and C. Road, for Cleveland and points East. Also connects with Junction Railroad at Hamilton for Oxford.

4:30 P. M. TEA N—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Also, connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago. Also connects with Junction Railroad at Hamilton for Oxford.

6 P. M. TRAIN—For Dayton, Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 8 A. M.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 109 Walnut street, near Gibson House; at the new Ticket Office on West side of Vine street, between the Post Office and the Burnet House; or at the Sixth Street Depot. D. McLAREN, Superintendent.

FREEDOM IRON COMPANY,

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods,
Bar of all Sizes.

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

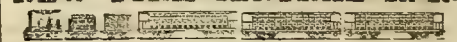
JOHN A. WRIGHT, Sup't.

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works. June 9.

New Time Table

OF THE

NEW YORK CENTRAL R. R.



Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp. 7:40 A. M.	7:40 P. M.	7:00 P. M.
Mail 9:00 A. M.	12:50 A. M.	
New York Exp. 11:15 A. M.	9:40 P. M.	9:40 P. M.
Night Exp. 5:00 P. M.	4:00 A. M.	4:00 A. M.
Utica Accom'm. 6:00 P. M.	Ar. U. 10:00 P. M.	
N. Y. Mail 11:15 P. M.	10:0 A. M.	10:00 A. M.
Leave Buffalo.	Leave Bridge.	Arr. Albany
New York Exp. 5:15 A. M.	5:15 A. M.	3:30 P. M.
Steamboat Exp. 8:00 A. M.	8:40 A. M.	8:00 P. M.
Mail 9:00 A. M.		2:30 P. M.
Cleveland Exp. 6:00 P. M.	6:40 P. M.	4:40 A. M.
Cincinnati Exp. 11:00 P. M.	11:00 P. M.	8:30 A. M.
Utica Accom'm. 11:00 P. M.		10:00 A. M.

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO., cor. Fourth and Walnut Streets, second floor, Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky., Columbus, O.,
Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, low-priced FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being alike on both sides, impossible to ravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions, free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

Send or call for a circular, containing all particulars, prices, testimonials, etc.
Feb 13. WM. SUMNER & CO.

1,200 Kegs No. 1 Railroad Spikes, $5\frac{1}{2}$ by 9-16th Corby, Gossin & Co.'s make for sale very low by
TRABER & AUBERY,
7 Public Landing

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action
SUCTION & FORCE PUMP

AND
Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

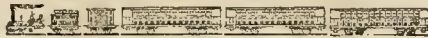
Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.
Orders thankfully received and promptly filled at the short notice.

SILVER MEDAL. (The highest prize) awarded for the compound Steam Pumping Engine at the late Fair, Ohio Mechanics' Institute. June 18, 1855—13

Commencing April 11, 1859.

**LITTLE MIAMI
AND—
COLUMBUS AND XENIA**



RAILROAD.

FOUR TRAINS DAILY.

Three Through Express Trains.

FIRST TRAIN—No. 1 Express, at 6 A. M., connects via Columbus and Cleveland; via Columbus, Crestline, and Pittsburg; Detroit via Cleveland and Steamers. This train stops between Cincinnati and Columbus at Loveland, Deerfield, Morrow, Xenia, Cedarville, South Charleston, London, and West Jefferson.

SECOND TRAIN—No. 2 Express, at 8:30 A. M., connects via Columbus, Bellair, and Benwood; Wheeling, via Columbus, Steubenville, and Pittsburg; via Columbus, Crestline, and Pittsburg; via Columbus and Cleveland; Detroit, via Cleveland and Steamer; Springfield. This train stops between Cincinnati and Columbus at Plainville, Milford, Loveland, Morrow, Spring Valley, Xenia and London.

THIRD TRAIN—Accommodation, at 4:40 P. M., for Columbus and Springfield.

FOURTH TRAIN—Night Express, at 11:30 P. M.; connects via Columbus, Bellair, and Benwood; Wheeling; via Columbus, Steubenville and Pittsburg; via Columbus, Crestline and Pittsburg; via Columbus and Cleveland. This train stops at Loveland, Morrow, Corwin, Xenia and London. Sleeping Cars on this Train.

No. 1 Express through to Cleveland without change.

The Night Express Train, leaving Cincinnati at 11:30 P. M., runs daily, except Saturdays. The other trains run daily, except Sundays.

For all information and Through Tickets to Boston, New York, Philadelphia, Baltimore, Washington, Buffalo, Niagara Falls, Dunkirk, Cleveland, Pittsburg, Wheeling, and all Eastern places, please apply at the offices, Walnut Street House, No. 1 Burnet House, south-east corner of Broadway and Front Streets, and at the Eastern Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Superintendent.
Omnibuses call for passengers by leaving directions at the Ticket Office.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE.

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the West, South-West and North-West.

Fare to New York and Boston ONE DOLLAR less than via any other route.

TWO TRAINS

Leave Wheeling daily at 8:05 P. M., and 11:30 A. M. Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City. Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$3.

Quick time and sure connections.

Inquire for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

E. F. FULLER,
General Western Agent.

L. M. COLE,
General Ticket Agent.

W. P. SMITH, Master Transportation.

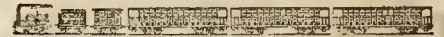
WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c. large Cuts for Snow Card, Posters, &c. executed in the highest style of the art.

MIDDLETON, STROBRIDGE & CO.,
119 Walnut st., Odd Fellows' Building

**CHICAGO,
Great Western and North-Western
ROUTE.**

**INDIANAPOLIS & CINCINNATI
SHORT LINE**



RAILROAD.

(VIA LAWRENCEBURG.)

Distance 110 Miles and No Change of Cars Between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS LEAVE CINCINNATI daily, (Sundays excepted) from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6 A. M.—Chicago and Terre Haute Day Express—Through to Terre Haute, Lafayette, and Chicago, with but one change of cars.

SECOND TRAIN, 4:15 P. M.—Accommodation—The 4:15 P. M. train arrives in Indianapolis at 10:10 P. M.

THIRD TRAIN—Chicago and Terre Haute Night Express—8 P. M.—Arrives at Indianapolis at 1 A. M. This train runs through from Cincinnati to Chicago, with but one change of cars.

The above trains make close connections at Indianapolis, Lafayette and Chicago.

WITH TRAINS FOR

Terre Haute,	Lafayette,
Springfield,	Jacksonville,
Rock Island,	Danville,
Galesburg,	Burlington,
Keosauqua,	Milwaukee,
Mattoon,	Pana,
Naples,	Peoria,
Galena,	Duaneith,
Quincy,	Racine,
Prairie du Chien,	Decatur,
Bloomington,	Joliet,
LaSalle,	St. Paul,

And all towns and cities in the North-west. Connections are also made at Indianapolis with the Peru and Indianapolis Railroad for Kokomo, Peru, Logansport, Fort Wayne, Toledo and Detroit.

Be sure you are in the right Ticket Office before you purchase your ticket, and ask for tickets

Via Lawrenceburg & Indianapolis.

THROUGH TICKETS.

Good until used, may be had at the Company's Offices, north-west corner Broadway and Front Streets, under Spencer House.

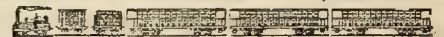
A. HAMILTON, Ticket Agent.
No. 1 Burnet House, north-west corner Third and Vine Streets.
WM. M. STARK, Ticket Agent.

Also at the Walnut Street House.
J. S. SHACKELFORD, Ticket Agent.

And at the Depot, where all necessary information can be had.
H. C. LORD, President.
W. H. L. NOBLE, General Ticket Agent.

Commencing May 22, 1859.

OHIO & MISSISSIPPI



RAILROAD.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCENNES, Cairo, and St. Louis, at 9:00 A. M., and 8:30 P. M.

Three Daily Trains for Louisville, at 9:00 A. M., 2:00 P. M., and 8:30 P. M.

One Train for Evansville at 8:30 P. E.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 8:30 P. M.

RETURNING.—Fast Line.—Leaves East St. Louis, (Sundays excepted) at 6:50 A. M., arriving at Cincinnati at 10:10 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 2:40 P. M. arriving at Cincinnati at 6:48 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the offices: Walnut Street House, bet. Sixth and Seventh Streets, No. 1 Burnet House, corner office; north-west corner of Front and Broadway; Spencer House Office; and at the Depot, corner of Front and Mill Streets.

W. H. CLEMENT, General Superintendent.

Omnibuses call for Passengers.

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

SOLE IMPORTERS.
PROSSER'S PATENT SURFACE CONDENSERS for high pressure steam, with sea or other bad boiler water, gauges, 3 cutter drills, counter-sinks, tube end cutting bars, expanders, tube cutters, steel wire and whalebone brushes, pall lever wrenches, tubes—plain or enameled, screwed together for Artesian Wells, Hollow Slabs for various purposes, Steel for Rollers.
THOS. PROSSER & SON,
27 Jan. 28 Platt Street, New York.

G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

BUSH & LOBDELL,
Wilmington - - - - - Delaware
MANUFACTURERS OF

CHILLED WHEELS
AND

TIRES,
For R. R. Cars & Locomotive Engines,

ARE PREPARED TO
Execute Promptly Orders to any Extent
FOR THEIR
CELEBRATED WHEELS,
EITHER SINGLE OR DOUBLE PLATE,
WITH OR WITHOUT AXLES.

WHEELS FITTED
To Hammered or Rolled Axles,
In the best manner, at the shortest notice, and on the
Most Reasonable Terms.

and
A Book for Every Business Man!
JUST PUBLISHED

—THE—
POST-OFFICE GUIDE!
For Post-Masters and Business Men.

CONTAINING
A Complete List of Post-Offices in the United States and Territories, arranged by States and Counties; A Complete List of all Distributing Post-Offices; Rates of Foreign and Domestic Letter Postage; Rates of Printed Matter, Transient and Regular; Abstract of the Laws and Regulations of the Post-Office Department, &c., &c.

COMPILED BY E. PENROSE JONES,
Late Assistant Post-Master at Cincinnati.
Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.
U. S. BLANK AGENCY, CINCINNATI POST-OFFICE, }
January, 1859. }

This work has been carefully compiled and corrected by E. PENROSE JONES, Esq., late Assistant Post-Master of the Cincinnati P. O., from the Records in this Department, and other sources, and contains the most complete list of Post-Offices, especially of the Western, North-Western, and South-Western States, yet published.

MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an active pamphlet of about 100 pages. The entire matter is kept standing in type, and as the compiler is promptly advised of all New Offices, Changes and Regulations of the Department, the information is corrected up to the last day of publication, an advantage possessed by no other work of the kind.

OBSERVE, That this list is arranged by States and Counties, making it especially valuable to business men. No similar arrangement has been published since 1856. There are 3000 more offices in this than in any book heretofore issued. The Price is one-half that of any work of the kind now published.

Single copies sent by mail (postage prepaid) to any address, upon receiving Twenty-five Cents in Silver or Postage Stamps. Five Copies sent for \$1.00, or Twelve Copies for \$2.00.

Address, C. S. WILLIAMS,
194 Walnut Street,
Cincinnati, Ohio.
Mar 10. 57.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Booksellers, Country merchants, and others to our extensive stock of School, Classical, Theological, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the principal manufacturers of Paper and Stationery, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

BOOKSELLERS,

Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, and Tea wrap-boards, Envelopes, Gold and Steel Pens, Penholders, Copying Books, Ink and Scales, Sealing Slates, Mucilage, Book rests, Bill Envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files; Date Calendars, together with all other articles used in the counting-house.

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We are prepared to Print and Bind books of any style, at rates as low as the quality of work cut in this whole. Our executing these branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Dray receipts, Cards, Circulars, or any other description of printing, will find that we do such jobs despatch. Orders respectfully solicited.

Publishers,

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, Clark's Compendium, Religious, Dick's Works, Rolin's Ancient History, Plutarch's Lives, Josephus, Spectator, Chain of Sacred Wonders, Familiar Science, Webb's Monitor, Soden's German, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, of narrative and Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

43 MAIN STREET CIN.

MOSELEY'S TUBULAR WROUGHT IRON



ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs, are wholly of Wrought Iron, or mixture of Wood and Iron; Sheetings always Iron.

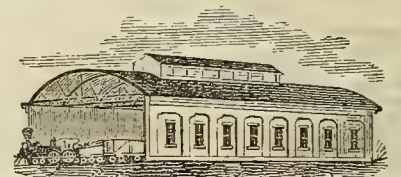
The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges. We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

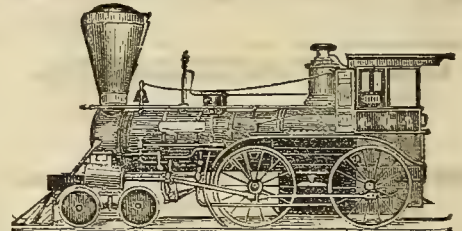
Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting. Office, No. 66 West Third street, Cincinnati, O. may 13. MOSELEY & CO.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap. 30 MOORE & RICHARDSON.

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DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, but more extended in Mathematics, Mechanics, Machines, Construction, Agricultural Chemistry and Mining Geology; also in English Literature, Historical Readings, and Modern Languages, accompanied by daily and regulated exercise.

Schools of Architecture, Engineering, Commerce, Medicine, and Law, admit of selecting studies to suit time means, and object of Professional preparation, both before and after graduating.

The twelfth annual term is now open. Charges, \$102 per half-yearly session, payable in advance.

Address the Superintendent, at "Military Institute, Franklin Springs, Ky.," or the undersigned.

P. DUDLEY,
President of the Board;

Jan 5. 57.

The Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

Thursday Morning, July 14, 1859.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.

One square, single insertion,.....	\$1 00
“ “ per month,.....	3 00
“ “ six months,.....	12 00
“ “ per annum,.....	20 00
“ column, single insertion,.....	5 00
“ “ per month,.....	10 00
“ “ six months,.....	40 00
“ “ per annum,.....	80 00
“ page, single insertion,.....	15 00
“ “ per month,.....	25 00
“ “ six months,.....	110 00
“ “ per annum,.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

THE European Agents for the *Railroad Record* are MESSRS. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

RAILROAD Presidents, Superintendents and Secretaries, are requested to send us copies of all Annual and other Reports they may issue, together with their Monthly Statements, and such other matters of interest as they may be willing to furnish us

The annual report of the Michigan Central Railroad Company states the business of the year as follows:

The gross receipts have been.....	\$1,899,777 94
Operating expenditures.....	\$670,572 90
Taxes.....	93,180 09
	\$1,072,732 98

Total.....\$847,045 07

The gross earnings of the road, as compared with the previous year, show a decrease of \$590,627 85; divided among the different branches of traffic as follows:

Decrease in Passenger earnings.....	\$332,430 17
Decrease in Freight earnings.....	202,312 86
Decrease in Miscellaneous earnings.....	5,884 82

Total.....\$590,627 85

A 5 per cent. dividend is announced by the Cleveland, Columbus and Cincinnati Railroad Co., payable August 1, at the office of the United States Trust Company, in the city of New York. Annexed is the official statement of the business of the half year:

Gross earnings for 6 months ending June 30, 1859.....	\$466,796 38
Expenses for the same time, including taxes.....	246,425 26

Net for 6 months.....\$240,371 12
5 per cent. dividend declared July 6, 1859... 237,395 00

Surplus.....\$3,006 13

Vol. 7.—No. 21.

THE MARQUIS OF WORCESTER'S CENTURY OF INVENTIONS.

No actual invention in the world, however great, has excited more surprise among thinking men, during a period of near an hundred years, than has the celebrated "Century of Inventions," by the Marquis of Worcester. The surprise and thought exerted arise from this, that in this Century of Inventions, are described, or foreshadowed, (obscurely it is true) some of the greatest and most useful inventions of our day. But, they were not described, so that any one could see clearly what they were. The question is, did the Marquis actually know any thing of these machines; or did he state what he supposed was possible and fancied would come to pass? Most probably the latter was the fact; but, in any case, his statements show great ingenuity, and make one link in the history of the human mind. They have exerted so much attention, at different times, and one still, so singular, as the production of that age, that we propose to let our readers know something of their origin and nature.

The Marquis of Worcester was the famous Earl of Glamorgan, a political character of the times of Charles the 1st. The Marquis died in 1667; yet his "Century of Inventions" was not published till 1783. Why not? Perhaps, because it struck his friends and others of his own period, as it did Horace Walpole when it was published, as an "amazing piece of folly." But an ingenious mechanic said, "that he highly esteemed the author, as one of the greatest mechanical geniuses that ever appeared in the world." Professor Robinson went so far as to say, the Steam Engine was undoubtedly invented by the Marquis. This was probably not the case; but a drawing of a Steam Engine was made from his description. He addressed to the King and Parliament his "Century," with a petition to encourage them. We shall here insert only those which seem to relate to important inventions of our own time. The following two evidently point out the TELEGRAPH.

6. How, at a window, as far as eye can discover black from white, a man may hold discourse with his correspondent, without noise made or notice taken.

7. A way to do it, by night as well as by day, though as dark as pitch is black.

This is the idea of a Telegraph, though no possible hint as to how it is to be done.

The following is the *Torpedo*, invented by Fulton.

9. An engine portable, in ones pocket, which may be carried, and fastened on the inside of the greatest ship, and at any appointed minute, though a week after, either of day or night, it shall irrecoverably sink the ship.

He afterwards says the ship can be guarded entirely against this, and that a ship may be made safe, though sunk a hundred times, be-

tween wind and water. In this, evidently, he alludes to a scheme generally adopted now, that is, *separate water tight compartments*. This is adopted in many of our steam vessels.

"28. A bridge, portable in a cart, with six horses, which, in a few hours time, may be placed over a river half a mile broad, wherein with much expedition may be transported home, fort and cannon."

This is the Pontoon bridge of the Engineers, which is now carried with all large armies, and with which the French armies cross the European rivers, in their wars.

"45. How to light a candle and fire, at what hours of the night one waketh, without rising, or putting one's hand out of bed; and the same thing becomes a serviceable portal at pleasure; yet, by a stranger not knowing the secret seemeth but a dextrous tender box."

We have only to imagine our modern Match, with a small revolver, and we have this machine, at once.

One of the most defined and curious of all his statements, however, is the following, which has only been practically realized within a few years.

"58. How to make a pistol discharge a dozen times, within one loading, and without so much as one new priming requisite, or to change it out of one hand into the other, or to stop one's horse."

This is a precise description of Colt's Revolvers, which have only been perfected very recently. This idea he expands in seven or eight different kinds of inventions, and seems to be fully aware of its importance.

His first idea of a steam engine seems to have been the following:

"68. An admirable and most forcible way to drive up water by fire, not by drawing or sucking it upwards. But, this way hath no bounder, if the vessels be strong enough; for, I have taken a piece of a piece of a whole cannon, whereof the end was bent, and filled it three quarters full of water, stopping, screwing up the broken end, as also the touch hole, and making a constant fire under it, within twenty-four hours it burst, and made a great crack, so, that having a way to make my vessels, so that they are strengthened by the force within them, and the one to fill after the other, I have seen the water run, like a constant fountain, forty feet high, one vessel of water rarified by fire, driving up 40 of cold water, etc., etc." All this, he says, may be done, by one man tending two cocks, etc.

This suggestion, any one will admit, is the germ of a steam engine.

Next comes the subject of locks and doors, in which many curious things are asserted. In "77," he says, that a "man may fly," and asserts that he has made a boy do it. If so, it is certain the secret has been kept; for, we know nothing of it now, though inventors are

constantly rising, who assert that they can do it.

"78" is a watch that will go without winding up, and will not "err much."

This points clearly to a class of chronometers, in which this has literally been done.

"87." A brass mould to cast candles, in which a man may cast five hundred dozen a day, and add an ingredient to the tallow which will make it cheaper, and yet so that the candles shall look whiter and last longer." Substantially, this is surpassed now a days in Cincinnati; for though higher priced, the improved candles are really cheaper. But, the process is now, by taking an ingredient out, instead of putting one in. May not something be added to common tallow, which will whiten and cheapen the candles?

"93" is an engine to take ships of five hundred tons out of the water, to caulk, trim, and repair. This correspond with our Marine Railway.

"97" is a Prospective Machine for taking views, as justly, and more true than any painter. This was not probably the Daguerreotype, but some kind of Camera. It was, no doubt, much in advance of any thing they had then.

"100" is what he called a "stupendous" machine, and considered the most wonderful. It was some kind of Water Works, and may be similar to such hydraulic works as we have now.

Taken in any view, Lord Worcester's Century of Inventions is a most remarkable document. There are in the world two classes of inventors; one who invent, or more properly, *foresee* what machines and inventions, not now possessed, are possible, and thus suggest classes of inventions. The other class are those who actually *invent machines*, without knowing really how far the *principle*, on which they are operating will go. They are often visionaries, striving for something like Perpetual Motion, impossible to be done; but, they are often, also, practical and successful men, like Whitney and Fulton; but, in neither case do they belong to that class of genius, which *foresees the possibilities of Science*. In the history of human progress, the latter are really the most important; for they suggest many possible and grand improvements, of vast importance to mankind, though they may never have made an actual machine. The Marquis of Worcester belonged to this class; and who can say how much of practical invention may have been due to his suggestions?

LETTER FROM W. WRIGHTSON.

SANTA RITA, June 7, 1859.

T. WRIGHTSON, Cincinnati, O.

DEAR SIR:—In reading over to-day the copy of my last detailed report, I find it dates back just twice as far as I had supposed. I design to report to you our progress in detail, every

two weeks, and in the interims, write such communications as the business of the company demands. And it has only been the pressure of engagements, when here, and frequent absence from Santa Rita on company business, that has led me to overlook my last dates.

Our mining operations have been conducted with vigor since my last. While other companies have been suddenly stripped of all their peon labor by the Sonoita outrages, of which a full statement was given in the *Arizonian*; we have, fortunately, been able to retain our peons. When the news first reached us, on the evening of the Sunday on which the outrages occurred, we could gather but a confused idea of the actual state of things, and an attempt was made to make us believe that the whole American population had resolved to drive out the Mexican peons. Our reply was, that for ourselves, we could not get along without Mexican labor, and that so long as our laborers did no wrong, we should stand by them, and not allow any one to interfere with them. As soon as the messenger was gone, we called up our peons, and ranging ourselves by the door of the house, and the peons in a circle around us, desired Mr. McCoy to tell them all we had learned, and to assure them of our determination to protect them.— This he did, and as he concluded his little address to them, they thanked us for the expression of our good will, and assured us that we should never be ashamed of them. That they knew there were bad Mexicans as well as bad Americans, and it should be their aim to protect us against all bad men of either nation, and they felt thankful that we had given them the assurance of our good will. We then dismissed them, and the next morning they went to work as usual. During the day, however, we noticed considerable alarm among those whose occupations were distant from the house, and after dinner, one of the men engaged in cutting wood, came rushing down to the house, stating that an armed force, of twenty men, were on their way to the house, but yet distant some two miles or more. I immediately sent for my horse to go and meet them, but before he came, I learned from another of the peons engaged in the same labor, that it was only our wagon, which the first one had seen in the distance, and which his excited imagination had converted into a band of mounted men, seeking for his blood. The affair created a hearty laugh among both Mexicans and Americans, and the day passed off quietly. The disturbances, as you already know, were generally discountenanced, and, with the aid of Col. Reeves and Capt. Ewell, four of the ringleaders have been arrested and sent to Mesilla—the county seat of our county, for trial. As the authorities there are mainly Mexican, it is quite probable the rioters will meet their just deserts.

In the Salero we are now over fifty-five feet deep, in the main shaft, with good indications.

So far, one end of the shaft has opened into the old work, but we seem now to be below the old paso. It may, however, be only a pillar left by the original workers. We work on with considerable anxiety, to reach the bottom of the old mines, but yet with perfect confidence that when we do get there we shall reap a rich reward. The fronton has been driven in over five varas, (yards) and has disappointed us somewhat by not furnishing the metal, which we expected to get at once. It is not yet time to say what we may get, as the old work, now filled with water, extends some distance beyond our present extent. The end of the fronton at present, is something near a hundred and twenty feet from the surface. When we once get below the old shafts in the main shaft, and beyond the old galleries in the fronton, to a portion of the vein which has not been gouged out, we feel confident that we shall get an abundance of ore. In the meanwhile, our only course is to push forward, as rapidly as possible, with the hands we can put at work. In the lower shaft, we are thirty-three feet deep. The vein is yet scattered, but "gathering," as the miners term it. We have considerable black oxyd of manganese here, which will answer a very useful purpose as a flux, when we begin our regular smelting.— Oxyd of manganese is useful in the arts, but I can not now say whether it will bear transportation to market. I am saving it, with reference to smelting. Our improvements at the Salero are finished, and we have there now an excellent house for the Major Domo, and comfortable quarters for the peons.

At the Crystal mine, as last reported, we had sunk the shafts over ten varas, and were running frontons both ways; we have got about four varas in each fronton, and have about thirty tons of ore at the mouth of the mine. I wish I could transport the pile to Cincinnati, that the stockholders of the company could see for themselves the character of the metal. It is as fine a vein of sulphuret of lead as can be found anywhere in the world. Were it in the States, no company could ask a richer legacy than this vein, and here it is invaluable to us for the lead which it will furnish to smelt our other ore; while the silver it contains will add to their results. As we had on the ground so much ore already mined, I deemed it prudent to place the hands at the lower shaft of the Bustillo mine. You will remember that it was our first care to sink the upper shaft of this mine to the depth of ten varas, and that the assay of the ore found in that shaft was three hundred and eighty-four ounces, or about five hundred dollars of silver to the ton of ore. In the upper shaft the vein is narrow, and the rock very hard. In the lower shaft we have a clear, distinct vein, five feet wide, enclosed on either side by hard, smooth, wall rocks, thickly covered with what miners term a clay slip. The whole vein, between these wall rocks, is tinged with the color

of the argentiferous salts of copper. As yet the metal is found in Bollettas of sulphuret of lead and silver. An assay, made by Mr. Kustel, showed four hundred and twenty-six ounces, or five hundred and fifty-one dollars per ton. We are now twenty five feet deep, and we think that a few feet further must give us an increased quantity of metal. You will observe that a very little of this metal, mixed with that of the Crystal mine, will give us very handsome results. We have two gangs of hands at work on this shaft, and are pushing it forward as rapidly as we can.

OUR SMELTING WORKS. Our experiments in smelting, as previously reported, were so far satisfactory as to demonstrate that the ores could be successfully treated, either in a blast furnace, or in a reverberatory furnace. We can not yet say with certainty what will be the yield of the Crystal vein in silver; some of it yields well, while other portions yield but little. Feeling that the practical advice of Mr. Kustel would be of great service to us, I took a specimen of the ore and rode over to Arivaca to see him—a distance of thirty-three or four miles from Santa Rita—and made an engagement with him to visit our mines. He examined the specimen I took over for lead, and found it to contain sixty per cent. of that metal. Pure galena is composed of 86.45 per cent. of lead, and 13.45 of sulphur. You will, therefore, observe that the foreign substances in this ore, do not comprise one-third its whole weight. By arrangement with Mr. Kustel, I have sent him one hundred and fifty pounds of ore, and when he has tried it in his furnace, he will furnish us with directions for putting up a substantial furnace for reducing this metal. In the meanwhile, we have been cutting wood and burning charcoal. We have a hundred cords ready cut, and a charcoal pit burned. It is now covered up to extinguish the fire. You will, therefore, see that we are now preparing to commence permanent smelting, and we trust its results will be as satisfactory as were our preliminary steps. The commencement of all these operations requires time, and, we trust, the company will see no reason for discouragement in the time necessary for doing all things well.

At the Ranch we have continued our farming operations, with a fair prospect of a successful result. We are already enjoying the fresh vegetables which it supplies us.

Our mules, which were very much reduced by the long and tedious journey from Texas, are now mostly in good condition. We have but one unfit for work, and that one is improving. I have never seen them look so well as they do now. The horses, too, are improving, and in a short time all our cavallade will be in as good condition as any in the country.

Respectfully, Yours,
W. WRIGHTSON.

The estimated cost of the Florida Railroad is \$3,500,000.

ANDROSCOGGIN & KENNEBEC R. R.

ANNUAL REPORT.

The earnings of the line of road composed of the Androscoggin and Kennebec and the Penobscot and Kennebec Railroads for the year, are \$281,929 86, being an increase of \$2,780 63, over the earnings of the previous year.

The expenses for the same time, are \$424,839 81, being a reduction of \$8,415 31, from those of the year previous. The Directors believe that the expenses for the last year have been reduced as low as it is possible to reduce them, consistently with maintaining the road and its equipments in a safe and efficient condition. In the department of the track, in consequence of the long and severe cold of last winter and its effect in the wear of the iron, it is likely the expenses of repairs will be increased in the year to come.

The net earnings belonging to this company for the year, are \$89,765 75, a sum not sufficient to pay the interest upon the indebtedness of the company, including the interest on the bonds payable in stock. The deficiency of net earnings to pay the interest on the indebtedness of the company, has been procured by your Directors, during the year, on their private credit, hoping that the business of the community would revive at an early period, and the earnings of the road be sufficient to meet the demands upon the company. Thus far, however, their hopes in this respect have not been realized.

For the condition of the company financially, you are referred to the report of the Treasurer, herewith submitted. From this, it appears that \$29,557, of the bonds of the 1st and 2d loan, issued in 1848, to run four years, are still outstanding and over due. The interest on these, has, however, been paid semi-annually, and the holders of these, who reside, for the most part, in Massachusetts, have been very indulgent to the company, in thus holding them so long after they were due. Eight thousand four hundred dollars of bonds, the balance of the \$250,000 loan created in 1852, not secured by mortgage, are also over due. During the year to come also, (in October, 1860,) a portion of the million loan bonds will become due, and the residue of that loan will fall due, from time to time, within the next four years. Provision for meeting these bonds, by renewal or otherwise, should be made during the year next to come. These together with the floating debt of the company, which has been increased during the last two years, by the falling off of the traffic of the road, will require the careful attention of the Directors for the coming year.

The relations of this company with all connecting roads have been during the year, and are now harmonious and friendly. The operation of the lease of the Penobscot and Ken-

nebec Railroad, with which your road is connected on the East, has been beneficial to both parties, and at the same time conducted greatly to the convenience and accommodation of that portion of the public, who have occasion to transact business over portions or all of the two lines embraced in the lease.

The contracts between this company and the Androscoggin Company, and the Grand Trunk Company, have been honorably carried out during the year, and the Directors again desire to express their satisfaction with the manner in which their trains have been managed over that portion of the Grand Trunk Railroad between Danville Junction and Portland. They have found the managers of that line at all times ready to afford all the facilities which they have asked. These are all the companies with which your road is by law connected and with all of them contracts, for a long term of years, exist.

TREASURER'S REPORT.

1859.	Dr.
June 1. To Capital Stock.....	\$457,000 02
“ “BOND ACCOUNT:	
Million Loan Bonds.....	1,000,000 00
Interest Bonds.....	8,400 00
Bonds of \$200,000 and \$500,000	
Loan.....	29,557 00
Furniture Bonds.....	500 00
Stock Bonds, convertible into Stock	
in from 41 to 64 years.....	710,900 00
To Stock Coupons.....	6,740 00
To Sundry Accounts, payable in Stock	
and Stock Bonds.....	1,820 00
To Balance Bills Payable and Receivable.....	92,649 39
	\$2,307,566 41
1859.	Dr.
June 1. By Construction Account.....	\$2,210,947 28
“ “Androscoggin R. R. Co. Bonds...	6,000 00
“ “Pen. & Ken. R. R. Co. Stock...	21,924 79
“ “Million Loan Bonds, not sold...	15,900 00
“ “Cash on hand.....	4,721 48
“ “Balance of Income Account....	48,972 86
	\$2,307,566 41

INCOME ACCOUNT.

1859.	Dr.
June 1. To 4-7 Net Earnings of And. and Ken.	
and Pen. and Ken. Railroads from	
June 1, 1853, to June 1, 1859.....	\$86,765 74
To Balance new account.....	48,972 86
	\$138,738 60
1859.	Cr.
June 1. By Balance of Income Account, June	
1, 1858.....	\$31,201 73
By Cash Coupon Interest Account....	102,021 00
By Interest Account.....	5,516 27
	\$138,738 00
1859.	
June 1. By Balance Income Account.....	\$48,972 86

EARNINGS.

From 101,177 Passengers.....	\$132,457 51
“ 70,455 63-100ths tons Merchandise.....	113,665 52
“ Express, Mail, etc.....	15,806 71
	\$281,929 86

EXPENSES.

For Repairs of Track.....	\$41,669 13
“ “Engines and Cars.....	22,894 19
“ “Buildings.....	1,230 11
“ “Fence.....	1,269 26
“ Train Expenses.....	12,258 11
“ Station Expenses.....	13,117 32
“ Salaries and General Management.....	6,512 46
“ Oil and Waste.....	3,684 84
“ Fuel.....	18,071 63
“ Lost and Damaged Goods.....	267 83
“ “Baggage.....	2 50
“ Legal Expenses.....	186 69
“ Printing and Stationery.....	640 22
“ Miscellaneous Expenses.....	3,024 52
	\$124,638 51

NET EARNINGS FOR THE YEAR:

And and Ken. R. R. Co., 4-7.. \$69,765 74
Pen. and Ken. R. R. Co., 3-7.. 67,324 81

157,090 55

\$281,929 86

LIABILITIES.

Bills Payable..... \$36,396 39

OVERDUE BONDS:

Furniture Bonds..... 500 00
Bonds of \$20,000 and \$350,000 Loan..... 29,557 00
Interest Bonds..... 8,400 00
Bills audited and approved..... 6,265 04
Interest..... 5,516 27

\$146,135 30

ASSETS.

Cash on hand..... \$4,721 48
Bills Receivable..... 3,747 00
Amount due from Stations..... 11,048 45
Amount due from P. O. Department..... 3,660 81
Wood on hand..... 20,752 26
Materials for repairs on hand..... 8,775 00
Mortgage Bonds, not sold..... 15,000 00
Androscoquin R. R. Co. Bonds..... 6,000 00
Penobscot and Kennebec R. R. Co. Stock..... 21,924 79

\$94,929 79

PENNSYLVANIA RAILROAD CO.

The twelfth annual report of this Company has been issued.

The earnings for the year ending December 31st, 1858, as compared with the preceding year, are as below:

	1857.	1858.
Earnings from passengers.....	\$1,244,858 76	\$1,372,327 35
Earnings from freight.....	3,374,049 13	3,536,296 31
From miscellaneous sources— rents and incidental receipts.....	276,770 47	276,957 02
Total revenue.....	\$4,895,678 36	\$5,185,580 68

and the comparative expenses for the same years:

	1857.	1858.
Motive power.....	\$759,161 27	\$915,278 15
Way and works.....	569,716 44	569,278 19
Transportation.....	1,438,683 15	1,357,912 20
Car Department.....	32,586 14	192,377 60
Total expenditure.....	\$23,007,742 90	\$3,021,865 14
Leaving the net receipts.....	\$1,854,916 86	\$2,163,322 02
Increase in net receipts of 1858 over 1857.....		\$328,405 16

The details of operating expense compare with the year 1857 as follows:

	1857.	1858.
Miles run by passenger trains.....	797,432	960,338
Miles run by freight trains.....	1,744 81	2,299,138
Miles run by all trains.....	2,542 263	3,189,466
Number of passengers carried.....	1,134,496	1,299,665
Passengers carried one mile.....	54,408 211	45,934,932
Receipts per mile run by passenger trains.....	\$1 55.7	1 40
Average distance per passenger, miles.....	48.0	44.6
Average receipt per passenger, cents.....	110	133.2
Number of tons of freight carried.....	530,422	1,133,189
Average receipts per ton of freight.....	\$6 42	3 11
Total average receipts per mile run, cts.....	190	162.6
Total average expense per mile run, cts.....	118	94.7
Per cent. of expense to receipts.....	61.79	58.27

COST PER MILE RUN.

For maintenance of way, cts.....	22.40	17.60
Repairs of cars, cts.....	9.14	6.13
Repairs of engines, cts.....	8.54	7.08
Fuel, cts.....	9.12	8.24
Oil, waste and tallow, cts.....	1.59	1.09
Total engine cost, cts.....	29.8	28.76
Gross revenue per mile of road.....	\$13,755 43	13,466 39
Operating expense per mile of road.....	8,516 68	7,849 16
Net income per mile of road.....	5,238 75	5,617 23
Net income per cent. on cost.....	7.35	7.83

The whole locomotive equipment consists of 209 engines, of which 123 are in first rate order, 44 in running order, 39 under repairs, and three out of service. The largest annual mileages on the several divisions were:

Between Harrisburg and Philadelphia.....	27,449
Between Harrisburg and Altoona.....	37,590
Between Altoona and Pittsburgh.....	51,291

* Twenty-two engines have been fitted with new copper furnaces.

The above being with passenger engines; with freight, the largest mileages were:

Between Philadelphia and Columbia.....	23,200
Between Columbia and Millin.....	24,152
Between Millin and Altoona.....	25,181
Between Altoona and Conemaugh.....	18,650
Between Conemaugh and Pittsburgh.....	25,479
The total average mileage by passenger engines.....	20,361
The total average mileage by freight engines.....	16,907

Of the engines, 22 have been fitted with copper fire-boxes, that material having been proved the most economical for coal burners. The average duration of copper having been with Pittsburgh coal, five years; the average of iron being only from 18 to 22 months. The net cost of putting in the copper fire-box, deducting the value of the old material, is per engine \$680 00. The cost of replacing with iron being \$479 00.

The Car Master remarks: "In repairing Freight cars, we have found it necessary, in many cases, to renew the bottom timbers, in consequence of bolsters not being sufficiently strong to carry the load; when this is the case, the longitudinal timbers give way and break across the center-plate. My experience in car repairs has shown me that this is a source of much trouble and expense on many lines transacting a large freight traffic; a heavy side bearing is also another objectionable feature in our car stock, thus preventing the truck from yielding readily to variations of track and curves.

In obedience to instructions, plans for overcoming these defects were submitted. The plan adopted is to use a centre-plate with fifteen inch diameter bearing, in an oil channel well protected, having a flange in the upper plate to foot a truss against, supported or sustained by tension rods running across the car. The side bearings are kept three-eighths of an inch clear, which will allow the truck to run any curve freely. This improvement has been applied at the different shops to one hundred and twelve eight-wheeled cars, and as fast as renewals are required or new cars built, the new patterns will be used; those already in service show favorable results. It will prove a saving to the company in the amount of power required to move a given number of cars, will be less injurious to rails and roadway, and prove of great value in the reduction of expenses in maintenance of cars, as the truss bolster will keep the car body in its proper shape, and allow the truck to curve without straining.

A uniform standard of pattern has been adopted for the Car Department at all the shops. This arrangement I consider of much importance, as it will enable us to get our entire equipment in each class uniform, and thus dispense with the necessity of keeping such a large variety of patterns and duplicate work on hand for repairs.

In accordance with your orders, to insure increased safety in passenger trains, all wheels and axles under Passenger, Baggage and Express Cars, which have been in service over eighteen months, are now being replaced with new four and a quarter inch axles, and new wheels of the most approved manufacture."

In the road department, there have been used for renewals upwards of 2,000 tons of new rails, 10,000 wrought chairs, 158,000 ties, 120,000 lbs. of spikes, and 20,000 cubic yards of ballast. Some of the wooden bridges have been replaced by those of iron. Others have been widened and renewed, and the road department, generally, has been thoroughly improved. On the Canal department there has been expended \$128,743 84, and received \$181,541 88, making the net from that department, \$52,798 04.

The Board of Directors remark in their report: "Although the severity of the recent monetary panic had passed at the date of your last annual meeting, yet the general stagnation of business of the country, in consequence of this shock to its credit, caused serious apprehensions that the year just closed would be marked by a falling off in the traffic upon your railroad. This, to some extent, has been the case in the passenger business of the line, but the statements from the proper departments, appended to this report, show that its tonnage has not only been maintained, but increased over that of any previous year.

In pursuance of the policy indicated in the last annual report of the Directors, floating or unfunded debt, existing at that time, has been reduced below three per cent. upon the paid capital of the company, as limited by the resolution of the stockholders—indeed it may be said to have been practically extinguished, as the resources of the company, immediately available, are ample to meet it at any time.

In their last annual report, the Board intimated that the dividend withheld in November, 1857, might be distributed to the shareholders at some period during the year. Since that time, however, the actual condition of the railroad companies in which this company had, under your instructions, become interested, has been more fully developed, and in consequence of the unfavorable character of their statements, the Board has deemed it more conducive to the permanent interest of this company that its capital should be preserved free from all financial sacrifices, and have, therefore, charged the amount of the original subscription to the Marietta and Cincinnati Railroad, and the income bonds received as interest from that company, together with the subscription originally made to the Springfield, Mount Vernon and Pittsburgh Railroad Company, with some other items, to profit and loss account.

The other roads aided by this company are the Pittsburgh, Fort Wayne and Chicago, and the Steubenville and Indiana Railroad Companies. The business of neither of these companies yields a direct return for the amount invested in them, yet the increased traffic drawn to the Pennsylvania Railroad by the connections thus formed with the north-west and the south-west, has afforded a fair equivalent for the outlay, while it has, at the same time, secured great commercial advantages to this city. We do not apprehend any material loss, other than the interest for a few years, upon the investments in these enterprises.—The additional assistance given by this company to the Pittsburgh, Fort Wayne and Chicago Railroad Company during the past year, has enabled it to extend its road from Plymouth, into the city of Chicago, a distance of 82 miles. This aid consisted mainly of iron rails removed from the Portage Railroad, purchased by this company from the Commonwealth, and no longer used by it in consequence of its occupying, practically, the same ground with the Pennsylvania Railroad across the Allegheny Mountain. The whole amount of cash expended for removing rails from the Portage road, and for new rails, spikes and chairs, amounted to 239,075 21."

For this advance, and the value of the iron furnished from the Portage road, the Pennsylvania Railroad Company is amply secured by a pledge of \$650,000 of the first mortgage bonds of the Pittsburgh, Fort Wayne and Chicago Railroad Company, together with a general oversight of that work until this advance is returned. This road was open through to Chicago on the 25th of December last. It still requires a considerable outlay to place it in a

condition to compete upon equal terms with its rivals. This will be made during the ensuing spring and summer. We shall then have a line from New York, Philadelphia, Baltimore and Washington, which will be the shortest and best from these cities to all the north-west, and which must, upon the revival of the trade of that region, give to that company not only ample revenues to meet the interest upon its securities, but finally yield a fair dividend to the shareholders.

The amount of coal delivered in the city of Pittsburgh, during the year 1858, was 99,540 tons, being 1,921 tons more than in the preceding year. The total number of tons of coal transported during the year 1858, was 140,007 in the cars of the company, and 200,531 in the cars of individual transporters.

To protect the newly developed coal regions at the Broad Top Mountain from the reduced prices established at the seaboard marts by the Cumberland miners, the Board reduced the tolls on the canal for Broad Top coal, and also the freights on the railroad to a point which has enabled the collieries of that region to continue and increase their product during the past year. These rates, though below those that may be considered remunerative, have preserved the business of that region, which must, finally, directly and indirectly, yield to the company a valuable and increasing traffic.

The dispatch and safety with which the large business of the road has been conducted, may be seen from the fact that in carrying 1,012,808 first class, and 16,862 emigrant passengers, not a single life has been lost. It has been deemed advisable to complete the unfinished portion of the double track between Pittsburgh and Lockport, on the west side of the mountains; and between Tyrone and Mill Creek, on the east, with a view to the accommodation of the business anticipated from the Pittsburgh, Ft. Wayne and Chicago Railroad.

"In accordance with a resolution of the stockholders, passed at an adjourned annual meeting, April 6, 1857, your Board of Directors published a separate report in reference to the extension of your road to the Delaware front of the city. The Board regards this extension as of the utmost importance to the interest of the stockholders and the prosperity of this city. Without such a connection with the shipping, accessible with locomotive steam power, where the freights can be transferred from the cars to vessels, or held in store for shipment, without the expense of double drayage, the Pennsylvania Railroad must be regarded as incomplete. The point at which it shall reach the Delaware is not material, if not too remote from the center of the business of the city. Space is what is required for the transfer and storage of the heavy products of the West and the interior. The point where this can be obtained upon the most favorable terms (the shipping facilities and the outlay necessary to reach it being equal) should be preferred. The cheaper facilities for transporting and shipping the heavy products of the West, furnished by the New York Canal and Hudson river, over all other avenues to the Atlantic seaboard, caused the transfer of the shipping interest of this port to New York. The removal or equalization of these advantages must return to it a large share of this export trade, bringing with it a corresponding increase in the imports. These advantages can not be secured without a reduction of the cost of placing these products on shipboard to its minimum, and the means furnished for storing them, without unnecessary charges, until shipped. The continuance of the exist-

ing arrangements to accommodate the western traffic, must perpetuate Philadelphia as a way station on the line to New York, if it does not force this business by the new route to that city, shortly to be opened, via Reading and Easton.—It may be stated as a general principle, that any unnecessary impediment to the free and uninterrupted passage of freight and travel through a city must, in this enlightened age, eventually result to its disadvantage."

In the month of August last the alterations of the railroad tracks required to pass the wide cars of the company from the station in Philadelphia to that in Pittsburgh were finished, and passengers now travel between those cities without change of cars. With regard to the canal department, it is remarked:

"The transportation of coal and lumber from the Broad Top and Allegheny regions may hereafter make the lower Juniata Division, from Huntingdon to the Junction, yield an income at least equal to its expenditures, when the depth of water shall have been increased to five feet; but that portion of the canal west of Huntingdon must continue to be unremunerative.

The condition of the purchase of the Main Line from the State, require that the upper Juniata and lower Western Divisions shall be kept in navigable order. In reference to the upper Western Division, no such requirement exists, and as there is no local interest that would be injuriously affected by closing this part of the line, it is not proposed to incur in future any considerable expense in its preservation.

The Board has directed the Engineer to proceed at once to deepen that portion of the canal from Columbia to the south bank of the Juniata, so as to admit of five feet depth of water, to accommodate the growing coal and lumber traffic of the Susquehanna Valley. This improvement, which is essential to the maintenance of this canal as a profitable avenue, with the rebuilding of several aqueducts on the Juniata, (all of which are in a dilapidated condition,) will about absorb the profits of the canal for the past year. After these improvements and renewals are completed, the Canal Department, under the economical system adopted for its management, will, we trust, yield an interest at five per cent., on one and a half millions of dollars incurred in the purchase of the Main Line.

The very low rates of transportation of coal upon the Chesapeake and Ohio Canal and the Baltimore and Ohio Railroad during the past year, rendered it necessary for this company reduce the charges on coal to the seaboard markets, to a point that has not allowed the boatmen to secure profitable rates from Huntingdon to tide-water. The improved condition of the canal has, however, enabled them to continue the competition to a limited extent, but when the line as far west as Huntingdon shall have been deepened as contemplated, the business may again return to the canal.—In the meantime, shipments can be made by railroad to near the mouth of the Juniata, and thence by large tide-water boats, without transshipment, to Philadelphia, Baltimore and New York."

The balance sheet at December 31st, 1858, stood as follows:

LIABILITIES.	
Capital stock.....	\$13,240,225 00
First mortgage 6 per cent. Dollar Bonds, payable 1880.....	4,955,000 00
Second mortgage 6 per cent. Dollar Bonds, payable 1875.....	1,928,000 00
Second mortgage 6 per cent. sterling Bonds, payable 1875.....	1,539,840 00
Bonds due State of Pennsylvania, 5 per cent.....	7,400,000 00
Mortgages and rent on real estate.....	321,611 11

Bills and accounts payable.....	476,602 72
Contingent Fund, dividends due and unpaid, and State tax on bonds.....	87,004 13
Balance to credit of profit and loss.....	135,450 31
Total.....	\$30,168,687 17
Receipts from the road for 1858.....	5,114,935 34
Receipts from the canal for 1858.....	181,541 88

Total up to December 31st, 1858.....\$35,465,454 39

ASSETS.

Cost of road and fixed equipment.....	\$10,443,135 39
Less profits of road to November 1, 1855, credited to cost of construction.....	569,183 79

Balance.....	118,3,910 60
Cost of Philadelphia and Columbia road.....	6,000,000 00
Cost of Penn. Canals and Portage Railroad.....	1,500,000 00
Rolling stock.....	2,808,509 27
Cost of real estate.....	1,540,381 05
Cost of telegraph.....	43,264 28
Extension of Penn. R. R. to S. & P. R. R.....	4,547 72
Stock of P., Ft. W. and C. R. R. Co.....	816,750 00
Bonds of corporations, accounts receivable, and balance in hands of treasurer.....	1,580,265 25

Total.....\$30,168,987 17

Transportation expenses, tolls, taxes on stock and real estate.....	3,519,119 44
Canal expenses.....	1,49,743 84
Dividends paid.....	715,383 00
Interest on bonds.....	593,457 85
Surplus profits.....	338,763 09

Total up to December 31st, 1858.....\$35,465,454 39

The officers of the company are: *President*, J. Edgar Thompson; *Vice-President*, Wm. B. Foster; *Treasurer*, Thos. T. Frith; *Superintendent*, Thos. A. Scott; *G. W. Grier*, *Master of Machinery*; and *W. H. Wilson*, *Master of the road department*.—*Times*.

SONORA EX. AND MINING CO.

The following letter from Mr. Ehrenberg to Col. Chas. D. Poston, Secretary of the above Company, we are sure will be read with interest. The importance and magnitude of the subjects treated upon, is sufficient apology for the room it occupies:

TUBAC, ARIZONA, June 11th, 1859.

COL. CHARLES D. POSTON, *Secretary Sonora Exploring and Mining Co., New York*, Dear Sir:—Any thing calculated to throw light on our mining operations, both as regards the past as well as the future, must have a tendency to encourage you at home and facilitate your transactions with other parties by instilling confidence in our enterprise. It is only once more and but for a short time that we need outside help to procure that, which we and every other mining company must have, and which we did not have at any time, "a sufficient working capital" commensurate with the wants to "open the mines properly," and "to enlarge our reduction works," to reduce ores on an extensive scale.

Our Mining Company was fortunate in finding an extraordinarily rich mine which was not only their salvation, but also that of the whole territory. Ordinary mines could never have offered inducement enough to the explorers to battle with the ocean of difficulties, dangers, and privations they had to contend with. To sketch them, it would take a volume, and the memory is only so far useful as they relate to the future. In an unknown, isolated, desert-locked country like Arizona, many errors by the first pioneers in mining operations were unavoidable, and these, with other unavoidable obstacles, well known at home, have delayed operations, and augmented the expenses so much beyond what they would be, if we had to do things over again. Taking it altogether, the whole amount expended is trifling, compared with that of the other Companies in Mexico and Peru. Only those can be dissatisfied who like to reap without sowing.

Neglect and slovenness is catching; allow one to break the rules, and soon none will observe them.

This also refers to the Mexican miners. Those in our employ now are mostly from northern Sonora, a district where no mining is carried on, excepting some little gold washing from placers and crushing from ores by poor men. These miners are a kind of mixed animal, brought up as herders, farmers, miners, and laborers in general, with a slight touch of the military. Such "Jacks of many trades" can of course not be expected to know one which they never learned. The proper way is to import some forty or fifty families from the purely mining districts of the South, from the mountains where mining is the only industry, where work at mining is preferred to change of occupation. This must be done in course of time, and the sooner we begin the better; but that capital is needed first.

The recommended machinery will at least reduce and crush ten tons of ore per day, which, allowing 300 days per year, will reduce 3,000 tons, yielding \$283 02 per ton—the round sum of \$849,060 00. The cost of superintendence will not be materially increased, nor that of the white employees, as several at work now, are so for the extension of the works, which will cease whenever the works are completed. The same applies to many Mexicans who are engaged building houses and making adobes.

My estimate may seem high, and it is undoubtedly higher than that of Mr. Lathrop, and reported to the company, but I, for my part, come to no other conclusion.

What proportion of the yield it will take to pay expenses, I can not well tell now, without a great deal of work and observation, but I do not believe it will exceed \$90,000 00 per annum, which would make the cost of quarrying and reduction per ton of ore to be \$30 00 for the present, which is high to go safe.

Such a result must not, however, be expected in the first six months, (as the 150 tons, estimated at \$150, will first have to be worked up;) not until we are fully under way. It must take some time for the completion of the works, the sufficient opening of the mines, and the procuring of good officers and men.

Before closing, I would again, as years ago, recommend a trial of the "Patio" process on a smaller scale; to find out the relative value of each method in this section of the country. During the warm weather the Patio will yield the silver in from fifteen to twenty days; and in a country like this it offers many advantages, among which is the non-consumption of expensive white labor; of wood, no roasting being necessary.

As soon as circumstances will allow a prospecting party of at least four men and one miner ought to investigate the adjoining veins in the Cerro Colorado district; and another, those of Arivaca. Until now nothing has been done, nor has the administration been able to attend to this matter; but as mining companies flock into the country, it becomes necessary.

We do not know what fortunes we may thus lose at any moment. All eyes here are directed to the Cerro Colorado; only want of knowledge and means prevent others from exploring.

Very respectfully, yours,

HERMAN EURENBERG.

THE PANAMA CANAL.

Almost as soon as the Europeans had discovered America, they commenced the search for some natural opening, something like a strait, in this long Isthmus of Panama, which barred the way to the great East, then called the Land of Spices, the object at which Columbus and his followers aimed. In 1520, during his transient friendship with Montezuma, Fernando Cortes anxiously sought from him the secret of the strait, which he longed so much to find, between the Atlantic and the Pacific Oceans. Unfortunately there was no strait, either in the domains of Montezuma, or in the rest of the territory which divides North from South America. Providence had only shown the opportunity, leaving it to man, as is often the case, to improve it; and all that Montezuma could do was to point out to Cortes the course of the River Goasacoalo, and the low ground back of Tehuantepec, as affording facilities for the construction of an artificial canal.

If the sacred fire which animated the great Cortes, the unfortunate Nanes de Balboa, and the other *conquistadores*, had continued to inflame Spain, the isthmus would have been pierced through at that time. But this glorious period was suddenly cut short by the tyranny of Phillip II., and the genius of Spain, from that time till now, when the spirit of 1789 has animated this generous people, has lain stifled under the leaden cloak which this stubborn despot, the enemy of all innovations and all liberties, has imposed upon it. From time to time the Spanish Government, striving to shake off its torpor, has made some incomplete and feeble demonstrations. Thus some very imperfect travelings were made here and there, in directions indicating a favorable line for a road or canal. A paved road, or rather a good mule path, was constructed across the narrowest part of the isthmus, from the city of Panama, which has given its name to the whole isthmus, and the famous harbor of Portobello. Something of the same kind must have existed in Mexico, from Tehuantepec to the river Goasacoalo, of which I have already spoken, which runs into the Atlantic Ocean some distance south of Vera Cruz, and which is navigable for a short distance, for it is certain that cannon, cast at the Philippine Islands, were carried over it to arm the fortress of San Juan d'Ulloa.

But it is not a road that is wanted so much as an artificial arm of the sea, permitting the largest ships to pass without unloading. Besides these very routes were soon abandoned, and the road from Panama to Portobello, though well paved, soon got out of repair.

Levels have been also taken for a canal following the course of the River San Juan from the Lake of Nicaragua to the Atlantic Ocean. This was done during the reign of Charles III. of Spain, (1759-1789) an enlightened prince, who was, however, unable to infuse a new spirit into the counsels of Spain. These preliminary arrangements produced no results.

When by heroic efforts, presaging a nobler future, the Spanish Colonies on the American continent gained their independence, the project of piercing the isthmus was renewed with great zeal. The liberator, Simon Bolivar, became interested in it. He caused levels to be run which yet left much to be desired, behind the City of Panama, by a Swedish Engineer, Capt. Falmask, and an Englishman, Mr. Loyd. Since then all the independent governments, who have territories on the Isthmus, have conducted examinations of the same

kind. Mexico, for example, having examined and re-examined the line from Tehuantepec to Guasacoalo.

The States of Central America, now unfortunately divided, have had their explorers, who have investigated the feasibility of the passage laid open for three quarters of the way by the Lake of Nicaragua, and the river flowing from it. One of the most deeply regretted victims of the civil disorders that rend that fair country, General Morasau, while at the head of the government of United Central America, commissioned a learned officer of the English Navy to examine this route carefully. Enterprising sons of the Anglo-Saxon race have come spontaneously from the United States, impelled by the feeling that to no people more than to them is it important that this barrier to navigation and commerce should be broken through. This interest has increased greatly since the discovery of gold in California. With that energy, at once intense and ingenious, that characterizes the race, and some times in spite of a people distrustful of such enterprising and ambitious neighbors, and feeling themselves without power or resources to oppose them, they have carefully examined its depths and its valleys, its gulfs and its bays. Their marks are found wherever there is a hope of forcing a passage. By them, at the present time, a common road has been established, and a railroad started in the Isthmus of Tehuantepec. In Honduras, Mr. Squier, personally and by aid of intelligent assistants, has located a line of railroad, which has many chances of success. Further south, the Isthmus of Panama, properly so called, has been crossed, through many difficulties, by a railroad, by the great activity of another citizen of the United States, Mr. Aspinwall.

The Isthmus of Darien, joining South America, and belonging to it, has also been examined by this adventurous race, but nothing has, as yet, resulted from these examinations.

In Nicaragua, explorations have been made lately, and we can no longer doubt the possibility, I dare to say even the facility, of cutting through the barrier between the Lake of Nicaragua, or the upper Lake of Leon, (or Managua,) and the Pacific Ocean.

To a cursory examination, the region between Panama and Portobello, or Chagres, presented remarkable facilities for the establishment of a maritime canal. In spite of indications made known in his new Spain, by the Nestor of the learned world, the illustrious Humboldt, the impression very generally prevailed that a trench, a few feet deep, would serve for a canal between the two oceans. So positive were the assertions on this subject, that in 1843 the French government commissioned an engineer to take travels there. M. Napoleon Garella, appointed to this duty, discharged it with all the care that could be expected, but the results obtained destroyed the hopes of those favoring the project. Thus, the palm has been awarded to the interesting country surrounding the Lake of Nicaragua. There must be the grand line of communication, by which Western civilization, represented by America and Europe, is to go to animate with its spirit the continents and archipelagoes of the Pacific; to wake from slumber, or to snatch from anarchy, the people who inhabit them, and to receive for its reward an abundant harvest of riches and of glory. A work, pregnant with such great results, and thus presenting itself as a mighty instrument of the most signal change that

The Tribune says the settlement of the June traffic on the New York Central line will show a gain upon the same month last year, of a few thousand dollars, say \$7,000 or \$8,000.

The Cattawissa Railroad Company suspended on Monday.

can be foreseen in the civilization of this world, merits an examination at our hands.

The best line for a ship canal through the Isthmus of Panama, is that which takes advantage of the Lake of Nicaragua, obtaining from this inexhaustible reservoir a supply of water for two branches, directed one towards the Atlantic, the other towards the Pacific Ocean. The superiority of this line depends upon the following circumstances:

1st. The immense supply of water contained in the Lake of Nicaragua.

2d. The slight elevation of the lake above the ocean, making but few locks necessary.

3d. The facility with which the canal can be brought to commodious ports on either ocean.

4th. The comparatively thickly settled state of the country through which it passes.

5th. The salubrity of the climate.

The Lake of Nicaragua is a sort of interior sea, for it is a 110 miles long, by 34 miles broad, presenting a general depth of about 80 feet, while towards the center it reaches to 280 feet. Forty rivers, many of which are navigable, bring to this magnificent lake the tribute of their waters. Besides these, it receives, through the River Tipitapa, the overflow of Lake Leon, or Managua, which is on a higher level, and which is thirty three miles long, with a perimeter of ninety miles. Nothing comparable to these reservoirs is to be met with on any other part of the Isthmus. From Lake Nicaragua issues a stream, the River San Juan, which, in times past, before its course had been disturbed by earthquakes, was navigable for three masted vessels; this fact is proved from documents drawn from the archives of the city of Granada, in Nicaragua, the originals of which I have seen in the hands of M. Rouhand, a French merchant established in that place. There is, then, in this lake twenty times the quantity of water needed for the supply of the canal proposed; for it is well known that the quantity of water needed for a canal is quite small when compared to that of a river, navigable to the same extent. Were a canal to be constructed through the country back of the city of Panama, and that is the most feasible line after that of Nicaragua, a supply of water can not be obtained without reaching a depth of 280 feet, or by forming a tunnel three or four miles long, and 125 feet high, so that ships may pass through. These two works are frightful, and yet M. Garella declares that they are the only alternatives, as may be read in his interesting work. Besides these, two canals for supply must be dug, at great expense, forty and forty-five miles long.

It is characteristic of the Isthmus that, in a length of 1,500 miles, it presents a number of points, where the chain of the Andes lowers its crest, which, with these exceptions, from Mount St. Elias, in North America, to the Straits of Magellan, it had constantly kept in the region of perpetual snow. A marked depression has already been pointed out at Tehuantepec—there is another, quite remarkable, near the city of Panama; a third is seen south of the junction of the isthmus with the continent of South America, between the River Atrato and the Pacific Ocean; another has been pointed out in Honduras, through which Mr. Squier has carried his line of railroad. But no part of the country is so low as that about the Lake of Nicaragua. In fact, this lake is only 122 feet above low-water mark on the Atlantic, and the levels reported by M. Belly lead us to the belief that, on the line from the lake to the Bay of Salinas, a summit level has been found only 132 feet

above this lake; and if the canal, on leaving Lake Nicaragua, is carried through the Lake of Leon, the summit level will be 50 feet lower and only about 210 feet above the ocean. Now the lowest summit level behind the city of Panama is twice as low.

The examinations of M. Garella make known a marked depression of the Cordilleras at that point, over an extent of about twenty-five miles, many valleys or crossings were discovered, whose elevations did not exceed 525 feet, but none lower than 380 feet above low water; and the line for the canal could not be carried through the lowest of these; that recommended by M. Garella passing over a summit 460 feet high.

(Concluded next week.)

THE GREAT EASTERN STEAMSHIP.

Scarcely two months ago, and the great ship was as desolate as a wreck, and with apparently as little chance of ever going to sea. Now the funnels are up; three masts are in and rigged; the paddle boxes are in; the engines nearly finished; bulwarks and decks complete; and a whole army of workmen are busily engaged getting forward her internal fittings. Such an amount of progress, when judged by other ships, may appear to be no great matter, but when we reflect a moment on the details, and find that the deck alone requires 18 miles of five-inch planking to cover it, that the paddle boxes are of rolled iron, that each contains 24,000 cubic feet, any is equal in size to a vessel of 600 tons, we begin to see that, in point of labor, some really astounding progress has already been made.

When tenders for finishing the vessel were first called for, in March last, the directors were dissatisfied with all, and therefore concluded an agreement with Mr. Scott Russell on the 4th of April, leaving it to that gentleman to finish his ship upon his own plans, and to fit her in every respect for sea as a first-class vessel. The contract was for £125,000, to be completed on the 4th of September, with a premium of £1,000 a week for earlier completion, and a penalty of £10,000 a week for each complete seven days beyond the allotted time. This agreement includes the masts, sails, rigging, boats, cables, engines, boilers, ironwork and woodwork, with suitable accommodation for 500 first class and 400 second class passengers. Of course, a contract so extensive is not all performed by Mr. Russell himself, but distributed in various branches among different firms, which he has been in the habit of employing for his other ships.

Some of these subdivisions include work enough to be really considered as extensive contracts. Thus the rigging will require 900 blocks, and no less than 79 tons of hemp rope, with 30 tons of mixed wire and hemp for the standing rigging. Her sails will consume nearly 12,000 square yards of canvas; she is to have 20 boats fitted with masts and sails complete, exclusive of the two small screw steamers each of which is to be 100 feet long by 16 wide, of 130 tons measurement, and 40 horse power. She is to carry upward of 1,000 fathoms of chain cables, all of the most massive description. Her anchors are 16 in number, ranging from one to seven tons (the largest.) Had she been fitted with the Admiralty anchor, and had the old rule been followed of requiring a certain weight of anchor according to the vessel's tonnage, her largest anchors must have been 25 tons each. By using Trotman's anchor, however, the same holding power is obtained with an anchor of seven tons.

On coming into possession of the vessel the new company thought that in case of war the Great Eastern might prove an invaluable auxiliary to the Government, if not for carrying guns, yet still more effectively in running down the largest of the enemies ships, which the immense speed of the vessel would enable her to overtake with perfect ease. For this purpose, therefore, it was decided to strengthen still more her sharp, powerful bows by laying down three complete iron decks forward, extending from the bows backward for 120 feet. These decks are entirely completed. They cover 8,000 square feet, and afford stowage for 1,400 tons of cargo space. They will not, however, be used for this purpose, but for accommodating the crew of 300 or 400 men. With this large increase of strength forward, the Great Eastern, steaming full power, could cut in two the largest wooden line-of-battle ship that ever floated. Of the other parts of the iron works which were contracted for, at least three quarters are already finished.

The wood work is getting on with almost equal rapidity. All these fittings are made on shore by means of powerful machinery, and come on board ready to be at once fixed in their places. When we say that the deliveries of these prepared materials prior to the 1st of June included 42,000 feet of beadings, 41,000 feet of moldings, 40,000 feet of matched battens—which, if laid on end, would extend nearly thirty miles—our readers will have a fair idea of the work now going on. Every thing connected with the vessel is on a gigantic scale. Thus, it requires more than six tons of paint to give one coat to the interior iron work, and nearly eight tons to give one coat to the outside, from the water line to the bulwarks. When completely rigged, she will have six masts—one forestaysail mast of wood, three mainmasts (square rigged) of iron, one mizzenmast of wood, and one jiggermast (the last) also of wood. The three wooden masts are already placed, and almost entirely rigged; the iron ones will be so shortly. The last mast is a single tree (Canada pine), about 130 feet high, and proportionately thick.

The foremast is a built mast, as is also the mizzen, but all the top masts, yards and gaffs, are single sticks of immense length and width; straight as arrows, and free from knots or sap. The cabins, as far as they have been yet fitted, are amply spacious when compared with the accommodation offered by other vessels. The berths are very ingeniously made to fold flat against the wall during the day, and so give much increase of room for any who may choose to use their cabins as sitting rooms. Both paddle and screw engines are almost completely finished, and the former have already been turned by hand and will be turned by steam by way of trial in the course of a fortnight or so. It is quite impossible by mere description to give any adequate notion of the colossal proportions of both of these sets of engines.

The paddle engines consist of four oscillating cylinders, of 74 inches diameter and 14 feet stroke; each pair of cylinders, with its crank, condenser, and air pump, forms in itself a complete and separate engine, capable of easy disconnection from the other three, so that the whole is a combination of four engines. A friction clutch connecting the two cranks is the means by which the engines can be connected or disconnected. All the sets of engines, both screw, paddle and auxiliary, are provided with governors, expansion and throttle valves. The paddle engines will work up to an indicated power of 3,000 horses or 33,000 lbs., when working 11 strokes per min-

ute with steam in the boiler at 15 lbs., the expansion valve cutting off at one-third of the stroke. All the parts, however, are so constructed that they will work smoothly either at eight strokes per minute, at 25 lbs. without expansion (beyond what is unavoidably effected in the slides), or at 16 strokes a minute with the expansion valve cutting off at one-quarter of the stroke. Under the latter circumstances, the paddle engines alone would give an indicated power of 5,000 horse.

The boilers are immensely strong, and have been tested to double the pressure they are required to bear. Their weight, including donkey engine, pumps, funnels, etc., is 210 tons, and they are capable of containing 156 tons of water. Each set has about 8,000 sq. feet of the surface, exclusive of flue or furnace, and about 400 square feet of fire bar furnace. Each is equal to supply freely with moderate firing steam for an indicator of 1,800 horse power when working with 15 lbs.; but with full firing can supply freely for an indicator of 2,500 horse power. The fireplaces and ash-pits are fitted so as to be well adapted for the use of anthracite coal.

The screw engines are constructed on the same improved principles. They have four cylinders of 84 inches diameter and 4 feet stroke. The cylinders are capable of being worked together or separately. When working 45 strokes a minute, with steam on at 15 lbs., and cutting off at one-third of the stroke, these engines give an indicated power of 4,000 horses, but at 55 strokes a minute, steam on at 25 lbs., and cutting off at one-quarter of the stroke, the power will reach 6,500 horses. Thus the united efforts of both screw and paddle engines will drive the immense vessel through the water with a power of no less than 12,000 horses. What fleet could stand in the way of such a mass, weighing some 30,000 tons, and driven through the water by 12,000 horse power at the rate of 22 or 23 miles an hour.

The screw engine boilers are in three distinct sets. Their weight is 352 tons and their capacity for water 270 tons. The probable consumption of coal when both engines are at full work will average 250 tons per day. The cellular compartments at the bottom of the ship will be used for pumping water into instead of ballast, and as the webs subdividing these are made perfectly water tight, any one or any number can be filled at pleasure. The trial trip will probably take place about the end of next September. No destination for this run has yet been fixed, but we would advise the directors, if they wish to maintain the great reputation the ship has already achieved with the public, not to let the matter be overlooked. A mere experiment cruise and a trial of her different rates of speed will not give the public such implicit confidence in the unrivaled capacity of the ship, as if she ran between two given points—say, from Portland to Gibraltar and back. On such a trip there could be no mistake whatever as to her rate of speed, which we firmly believe will surpass even the most sanguine expectations that have yet been formed.

The objections which have been urged against this noble vessel are precisely of the same sort as those which have been advanced against improvements of every kind—against railways, steam machinery, iron ships and large ships. What would not have been said twenty years ago against building such vessels as the Himalaya or the Persia—what, in fact, was not predicted against them when they were built? The Great Eastern is to be the Himalaya of her class, and the results which will be

attained by her speed we believe will revolutionize our whole mercantile marine. Both as a commercial speculation and as an engineering triumph, her success is now undoubted, and under the energetic management of the new company her voyages are likely to be as lucrative as they will be rapid. The day is not far distant when the Great Eastern will only be one of a class of steamers, and Mr. Brunel, to whom alone the great ship is due, will see in such fruits the highest reward which even his great skill and enterprise can achieve.

—*London Times*, June 17.

MONETARY AND COMMERCIAL.

During the week past, the demand for money has been somewhat brisk, but has been freely met by the regular houses at the usual rates on first class paper. The supply of currency, although not large, is sufficient to meet the demand, and with the present almost certainty of good crops of the leading staples, but little fear is entertained for the future.

Eastern Exchange is in better supply, and rates a shade lower than a week ago. We give the following quotations:

	BUYING.	SELLING.
New York Sight.....	1/2 prem.	1/2 @ prem.
Boston.....	1/2 prem.	1/2 @ prem.
Philadelphia.....	1/2 prem.	1/2 @ prem.
Baltimore.....	1/2 prem.	1/2 @ prem.
New Orleans.....	1/2 dis.	1/2 par.
American Gold.....	37 @ 40 prem.	1/2 prem.

The N. Y. *Courier and Enquirer* of July 12, says:

The Bank Statement for the week shows no decline in the amount of Specie held, notwithstanding the export of the past week. The result is as follows:

In Loans, a decrease of.....	\$757,140
In Deposits, a decrease of.....	1,119,600
In Specie, an increase of.....	2,084
In Circulation, an increase of.....	187,271

The Stock Market to-day is in better condition. The fine prospects for a rich grain harvest are such as to give more firmness to holders of Western Railway shares. New York Central shares opened this morning at 73 1/2, and closed at 74 1/2, at the First Board. One quarter of one per cent. advance on this stock gives an impulse to nearly all others on the list.

The following, from the N. Y. *Courier and Enquirer*, gives complete and official statistics of the Exports and Imports at New York, for the month of June, and the several months of the fiscal year which closed on the 30th of June.

The Export statistics show a business which, under the circumstances, has been remarkably well sustained—in fact, this branch of trade appears to have steadily increased since the beginning of the past year, as compared with the two preceding years. And this relative increase has been accomplished against many drawbacks. The extreme, and exorbitantly expensive quarantine of last season, prevented the accumulation of many products of the Southern States and West Indies which are usually exported largely from here; the export of breadstuffs has almost entirely ceased, and many descriptions of provisions have been less freely exported than usual. Nor has there been any particular increase in the export demand for any article of merchandise, except, perhaps, of Naval Stores and Staves—articles which swell an export list but slowly. The values have been sustained, in a great measure, by the largely increased exports of home manufactures; and, although the sum of these may be less, the effect of their exportation upon the prosperity of the country, can not be overvalued.

The export of specie is two millions above the highest previous figure, and there are those who believe that this, with the large product of the California mines, is as legitimately an article of export, under ordinary circumstances, as Cotton, Breadstuffs and provisions. The total value of the exports for the year is \$105,500,000, \$100,000,000 for the previous year, an increase of six millions, and against \$127,000,000 for the year 1856-7, a decrease of twenty-three millions—the increase in the former case being more than made up by the increased export of specie, and, in the latter case, the decrease is wholly in merchandise. Of the merchandise exported for the last year, \$33,000,000 were in domestic goods, against \$35,000,000 last year, and \$75,000,000 the year before.

The importation has been very heavy for the past six months, and for the last quarter beyond all precedent; but still, for the year, is some six millions less than for the year ending June 30th, 1857. It has, doubtless, been stimulated by the European war, and by the small importation for the eighteen months previous. The importation for the past two years, ending June 30th, 1859 was as follows:

Two years, ending June 30th, 1857.....	\$124,391,743
Two years, ending June 30th, 1859.....	391,689,616
Decrease.....	\$32,711,097

And, instead of having decreased, the wants and capacity of the country have actually greatly increased, by the extension of the frontiers, and by the increased attention which is given to productive over speculative pursuits. So we are not yet ruined by the excessive importation, although, it

must be confessed, the prospect of a contraction in this branch of trade is not very flattering. Of the imports of the past year, \$93,500,000 were in Dry Goods, \$125,000,000 in General Merchandise, and \$1,300,000 in Specie and Bullion.

The receipts from Customs at this port, are nearly thirty-five millions of dollars.

We now subjoin the statistics in detail, to which a recapitulation is added:

EXPORTS.

Exports from New York to Foreign Ports for the Month of June.

	1857.	1858.	1859.
Domestic Mdse.....	\$5,395,312	6,782,939	4,860,295
Foreign Mdse. dutiable.....	512,349	350,990	187,532
Foreign Mdse. Free.....	732,123	158,769	126,255
Total Mdse.....	\$6,639,789	7,292,698	5,194,172
Specie.....	7,919,354	594,174	7,496,981
Total exports.....	\$14,579,143	7,886,872	12,691,153

Value of Exports, exclusive of Specie, from New York to Foreign Ports, for the several Months of the Fiscal Years:

	1856-7.	1857-8.	1858-9.
July.....	\$7,032,312	5,263,452	5,119,844
August.....	5,913,003	5,337,449	4,967,394
September.....	7,622,279	5,202,630	3,896,245
Total 1st quarter.....	\$20,567,594	14,803,531	14,003,477
October.....	6,332,345	7,509,021	5,753,611
November.....	5,779,350	6,426,482	3,655,635
December.....	8,697,112	4,562,410	4,312,115
Total 2d quarter.....	\$20,808,807	18,897,913	13,991,361
January.....	4,884,170	4,669,739	4,114,008
February.....	5,947,791	4,173,567	3,735,633
March.....	9,015,826	5,180,600	7,686,001
Total 3d quarter.....	\$19,848,847	14,044,166	13,725,642
April.....	5,672,145	6,099,926	6,774,699
May.....	6,510,933	4,606,578	5,914,759
June.....	6,639,789	6,892,698	5,194,172
Total 4th quarter.....	\$18,822,867	17,599,202	17,883,621

Export of Specie from New York to Foreign Ports for the several Months of the Fiscal Years:

	1856-7.	1857-8.	1858-9.
July.....	\$5,771,091	3,681,377	2,811,496
August.....	3,249,153	6,271,147	2,201,102
September.....	3,738,547	906,476	3,239,591
Total 1st quarter.....	\$13,758,891	10,860,070	8,242,899
October.....	4,966,660	297,259	3,028,405
November.....	2,915,439	3,291,931	4,175,700
December.....	1,779,781	7,332,852	1,898,298
Total 2d quarter.....	\$9,743,280	11,071,542	5,198,583
January.....	1,307,946	4,745,611	2,305,688
February.....	1,831,726	3,746,920	2,371,427
March.....	2,174,965	1,366,194	3,343,677
Total 3d quarter.....	\$5,314,637	9,854,725	8,020,792
April.....	3,354,105	6,786,285	6,299,167
May.....	5,819,266	1,790,775	11,421,032
June.....	7,919,354	594,174	7,496,981
Total 4th quarter.....	\$17,083,425	3,631,334	25,177,170

Total Value of Exports from New York to Foreign Ports, for the several Months of the Fiscal Years:

	1856-7.	1857-8.	1858-9.
July.....	\$14,803,413	10,860,070	7,921,030
August.....	9,115,059	11,499,166	7,169,186
September.....	11,360,826	6,193,116	7,135,226
Total 1st quarter.....	\$35,280,199	26,691,202	22,645,462
October.....	11,379,005	7,816,250	8,784,116
November.....	10,735,169	10,653,713	3,337,605
December.....	10,676,893	12,097,402	6,270,323
Total 2d quarter.....	\$32,791,087	29,260,455	19,389,944
January.....	6,192,116	9,425,350	6,419,696
February.....	7,770,512	7,901,507	7,107,160
March.....	11,190,856	6,517,051	9,219,678
Total 3d quarter.....	\$25,154,484	23,372,911	21,746,434
April.....	9,026,950	6,746,213	13,378,866
May.....	12,400,109	6,387,353	17,335,782
June.....	14,579,143	7,486,872	12,691,153
Total 4th quarter.....	\$36,006,292	20,630,436	43,601,201

Exports of some of the Leading Articles of Merchandise, from Jan. 1 to July 1.—(Six Months.)

	1857.	1858.	1859.
Cotton, bales.....	106,732	85,694	99,302
Flour, bbls.....	551,906	716,304	294,732
Rye Flour, bbls.....	1,842	3,740	3,540
Corn Meal, bbls.....	29,672	39,920	40,910
Wheat, bu.....	1,023,905	1,916,346	29,977
Corn, bu.....	1,637,364	1,438,573	101,725
Rye, bu.....	81,446		
Beef, bbls. and tcs.....	57,038	40,456	56,632
Pork, bbls.....	43,280	37,390	69,404
Bacon, etc., lbs.....	18,359,873	16,116,850	5,672,726
Lard, lbs.....	11,910,169	6,887,253	3,795,703

Cheese, lbs.....	1,096,095	1,924,516	1,946,876
Butter, lbs.....	324,291	685,116	1,500,000
Ashes, bot, casks.....	8,262	7,524	8,130
Ashes, pearl, casks.....	2,238	1,050	1,484
Beeswax, lbs.....	91,563	104,420	95,877
Rosin, bbls.....	259,510	210,252	239,337
Crud. Turpentine, bbls	19,357	43,504	49,637
Spirits Turpentine, bbls	24,651	26,607	28,539
Tar, etc., lbs.....	35,279	10,766	23,312
Rice, casks.....	20,774	18,588	21,503
Tobacco, Crude, pkgs.	3,794	34,317	32,270
Tobacco, Mfd., lbs.....	1,49,574	1,938,124	2,897,094
Tallow, lbs.....	1,236,768	693,770	1,162,299
Whalebone, lbs.....	7,251,134	5,24,174	962,226
Domestics, pkgs.....	19,683	20,264	41,673
Oils, Whale, galls.....	.....	61,673	74,673
Sperm.....	.....	212,952	521,444
Lard.....	.....	16,973	19,431
Linseed.....	.....	25,000	16,870
Candles, bxs.....	.....	35,620	38,273

IMPORTS.

Value of Imports at New York from Foreign Ports for the Month of June:

	1857.	1858.	1859.
Dutiable Goods.....	\$2,471,723	6,652,563	14,919,315
Free Goods.....	957,356	953,014	3,189,861
Warehoused.....	11,540,126	1,408,733	5,494,553
Specie and Bullion.....	369,961	102,132	45,592
Total Imports.....	\$15,339,126	10,116,442	24,069,831
With'dn from Whse.....	781,699	1,560,140	2,869,231

Value of Imports at New York for the several months of the Fiscal Years:

	1856-7.	1857-8.	1858-9.
July.....	\$25,716,332	35,800,206	18,515,747
August.....	23,919,665	20,016,498	19,624,176
September.....	15,369,362	16,247,360	15,473,295

Total 1st quarter.....	\$64,945,359	72,664,064	53,603,218
October.....	13,825,592	14,939,667	13,542,084
November.....	14,498,545	13,417,960	10,591,606
December.....	12,015,944	8,196,711	13,344,625

Total 2d quarter.....	\$40,369,381	36,054,038	37,469,219
January.....	19,066,732	8,105,719	19,447,962
February.....	25,524,358	9,291,916	18,247,370
March.....	21,128,495	11,291,762	20,820,456

Total 3d quarter.....	\$65,659,586	29,044,467	59,117,788
April.....	21,218,318	11,166,025	22,425,619
May.....	18,705,255	11,454,713	23,552,646
June.....	15,339,126	11,116,442	24,069,821

Total 4th quarter.....	\$55,262,699	32,740,170	70,048,086
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CUSTOMS' REVENUE.

Custom Receipts at the New York Custom House for the several Months of the Fiscal Years:

	1856-7.	1857-8.	1858-9.
July.....	\$5,441,544	6,967,020	3,387,305
August.....	5,224,118	3,946,830	3,515,118
September.....	3,702,199	2,249,983	2,672,936

Total 1st quarter.....	\$14,427,891	13,183,843	9,605,359
October.....	3,791,231	667,535	2,054,334
November.....	2,774,844	1,121,793	1,706,525
December.....	2,381,916	1,172,393	2,020,996

Total 2d quarter.....	\$8,538,045	3,161,721	5,782,255
January.....	4,537,378	1,631,475	3,478,471
February.....	5,117,250	2,073,785	3,328,639
March.....	3,752,185	2,213,452	3,161,011

Total 3d quarter.....	\$13,406,813	5,918,712	9,971,171
April.....	3,361,667	1,735,510	3,212,161
May.....	1,907,290	1,748,520	3,011,520
June.....	677,811	1,685,663	3,314,430

Total 4th quarter.....	\$5,826,708	6,166,041	9,531,011
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Value of some of the Leading Articles of Import from Jan. 1 to July 1.—(Six Months.)

	1857.	1858.	1859.
Coffee.....	\$3,544,729	3,069,289	4,375,439
Guano.....	67,578	126,890	96,147
Hair.....	158,020	99,307	352,338
Hemp.....	433,590	446,210	468,915
India Rubber.....	225,288	201,345	241,418
Rugs.....	394,674	218,249	450,450
Salt.....	168,687	135,593	128,015
Sugar.....	13,222,394	8,120,430	12,055,794
Tea.....	3,594,449	5,293,495	5,168,043
Tobacco.....	547,568	551,016	556,457
Jewelry and Watches.....	1,493,102	861,535	1,741,969
Indigo.....	193,444	146,488	416,622
Madder.....	513,657	42,881	709,125
Bleaching Powder.....	99,528	86,249	137,487
Peruvian Bark.....	62,051	210,332	103,684
Hides.....	3,203,515	2,795,781	6,928,730
Iron, etc., Bar.....	1,486,183	464,720	1,528,655
Do. Pig.....	268,180	120,819	319,013
Do. Railroad.....	1,747,749	43,381	527,215
Lead.....	761,806	196,792	892,519
Steel.....	645,976	311,000	765,093
Tin, Pig.....	394,204	212,973	659,519

Do. Plate.....	1,630,432	726,676	1,853,210
Spelter.....	313,209	105,556	254,763
Wool.....	724,630	178,613	1,426,503
Molasses.....	4,315,547	859,321	1,297,000
Brandy.....	626,912	236,919	1,568,344
Rum.....	71,522	61,788	101,624
Gin.....	299,657	109,371	324,953
Wine.....	700,678	248,466	824,69
Champagne.....	421,645	207,161	735,140
Linseed Oil.....	435,134	53,235	305,183
Olive Oil.....	70,317	31,798	134,373
Manufacturers of wool	11,527,100	6,086,685	17,756,115
Do. cotton.....	11,35,792	5,181,299	13,634,542
Do. silk.....	14,743,519	7,959,272	15,910,096
Do. flax.....	5,355,440	2,080,914	5,679,118
Do. miscel'ous.....	4,113,701	1,730,681	2,933,943

RECAPITULATION.

EXPORTS.
Merchandise.

	1857.	1858.	1859.
6 mos. ending Jan. 1..	\$13,626,401	34,701,444	27,994,824
6 mos. ending July 1..	38,661,714	31,653,388	31,609,263

Total 12 mos.....	\$82,288,115	66,344,632	59,604,097
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Specie.

6 mos. ending Jan. 1..	\$22,144,781	21,962,112	13,641,472
6 mos. ending July 1..	32,398,062	12,359,959	33,197,972

Total 12 mos.....	\$44,842,843	34,322,071	46,839,444
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Total Exports.

6 mos. ending Jan. 1..	\$66,071,182	56,663,556	41,636,306
6 mos. ending July 1..	61,059,776	44,033,347	64,807,235

Total 12 mos.....	\$129,130,958	100,666,903	106,443,341
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IMPORTS.

6 mos. ending Jan. 1..	\$105,254,740	109,638,702	91,092,433
6 mos. ending July 1..	120,922,285	61,884,667	129,164,874

Total 12 mos.....	\$226,177,025	171,423,339	220,257,307
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CUSTOM REVENUE.

6 mos. ending Jan. 1..	\$92,976,544	16,345,554	15,397,613
6 mos. ending July 1..	19,933,521	11,009,113	19,512,182

Total 12 mos.....	\$42,270,165	27,434,667	34,909,796
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RECEIVER'S REPORTS OF THE C. W. & Z. R. R. FOR APRIL AND MAY.—We annex abstracts of the Receiver's Reports of the C. W. & Z. R. R. for the months of April and May. That for April was Mr. Gest's final report before retiring from office; that for May is Col. W. K. Bond's first report, viz:

REPORT FOR APRIL—CASH RECEIPTS.

Freight earnings.....	\$9,930 17
Passenger do.....	4,786 92
Receipts from other sources.....	2,419 65
Total receipts.....	\$17,136 03

Disbursements..... \$15,304 55

The liabilities real or nominal, settled or remaining unpaid so far as adjusted, and arising out of the transactions of the road prior to appointment of Receiver, March 4th, 1857,

Amount in aggregate to..... \$19,119 94

Outstanding May 1st, 1859..... 37,315 84

Showing the liabilities to be..... \$2,804 10 less than at the time of appointment of Receiver. Of the \$37,315 84 outstanding, May 1st, 1859, \$7,834 74 of the same is due McCallum, Bristol & Co., on account of building bridges.

MAY REPORT.

Col. Bond reports that after entering office, he employed John W. Webb, Esq., a competent Civil Engineer, to examine the road, its rolling stock, &c., and that he made a report corresponding with one previously made by E. Gest, Esq., published in this paper, with the exception that Mr. Webb states that it will be necessary to put down new cross-ties throughout the entire road the next two or three years.

OPERATIONS.

Total cash receipts from April 2 to May 31.....	\$20,582 78
Disbursements from April 27 to May 31.....	22,687 03
Operating, Repairing and Improving Road during May.....	13,357 28
Gross earnings during May.....	12,716 60

Commercial.

OHIO AND MISSISSIPPI RAILROAD—ITS MANAGEMENT—ITS SUCCESS, AND ITS FUTURE.—For the past six months, we have been watching the progress of this road towards public favor, and out attention was thus directed by the novel attempt on the part of the new men, that in December last undertook to manage its passenger business here in our midst. We say novel, for they boldly announced that they intended to rely upon the truth, and to eschew all misrepresentation.

We view the new line of action with much interest, not that we doubted that truth was the best policy, but that we feared the fallibility of man, and that the change was too great for railroad human nature to bear. The result, however, has been to dissipate all doubt upon the subject. The truth telling line of policy was adopted, and finally carried out, and the result has been that the travel by this route has been increased beyond precedent, notwithstanding that the general railroad interest has been suffering, and that all the great thoroughfares in the State show a large decrease in their passenger traffic; yet the Ohio and Mississippi shows a large and important increase.

The general management and policy of this important road has been such as to command the respect and patronage of the traveling public, the evidence of which can be witnessed daily on the arrival or departure of trains.

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANA OR SANDOVAL

FOR

Decatur, Springfield,
Bloomington, Peoria,
Burlington, Quincy,
La Salle, Rock Island,
 Dixon, Galena,
Prairie du Chien, St. Paul, and
St. Anthony,
And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANA for all the above points. Connections also made with OHIO AND MISSISSIPPI R. R. with T. C. E. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via

PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line of

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all

TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

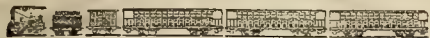
Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,
Gen'l Southern Agent, Cincinnati.

W. P. JOHNSON,
Gen'l Passenger Agent, Chicago.

June 21, 1859.

Cincinnati, Hamilton and Dayton



RAILROAD.

FOUR TRAINS

LEAVE THE SIXTH STREET DEPOT DAILY.

TRAINS RUN THROUGH TO RICHMOND, LIMA,
SANDUSKY, AND DELAWARE WITHOUT
CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND
NORTH-WESTERN CITIES.

(Columbus time, which is seven minutes faster than Cin-

cinnati.)
6 A. M. EXPRESS TRAIN—For Cleveland and
Pittsburg, via Delaware, makes close connection at
Crestline for Pittsburg, Baltimore, Philadelphia and New
York; and at Cleveland for Dunkirk, Buffalo, Boston and
New York. Also, connects at Dayton with Dayton and
Michigan Road, for Troy, Piqua, Sidney, Lima, Fort Wayne
and Chicago, reaching Chicago at 7:30 P. M., Quincy and
Galena at 7 A. M. Also, at Dayton, with Greenville and
Miami Road, for Greenville, Union, Winchester and Mun-
roe. Also, connects at Richmond with Indiana Central
Road, for Indianapolis, Lafayette, Chicago, Terre Haute,
St. Louis, and all Western Cities. Also, at Richmond,
with Cincinnati and Chicago Road, for Anderson, Kokomo
and Peru.

8 A. M. MAIL TRAIN—For Dayton, Spring-
field and Sandusky; connects at Urbana, for Columbus;
connects at Sandusky with STEAMER FOR DETROIT;
at Forest with Pittsburg, Fort Wayne and Chicago Road
East and West; at Clyde with C. and Toledo Road, for
Cleveland and Buffalo, Toledo, Detroit and Chicago. This
train also connects at Delaware with the C., C. and C.
Road, for Cleveland and points East. Also connects with
Junction Railroad at Hamilton for Oxford.

4:30 P. M. TRAIN—For Dayton, Springfield and
Sandusky; connects at Forest with Pittsburg, Fort Wayne
and Chicago Road East and West; at Clyde with C. and
Toledo Road for Cleveland and Buffalo, Toledo, Detroit
and Chicago. Also, connects at Richmond for Indianapo-
lis, Terre Haute, St. Louis and Chicago. Also connects
with Junction Railroad at Hamilton for Oxford.

6 P. M. TRAIN—For Dayton, Troy, Piqua,
Sidney, Lima, Fort Wayne and Chicago, reaching Chicago
at 8 A. M.

For further information and Tickets apply at the
Ticket Offices:—North-east corner of Front and Broadway;
No. 169 Walnut street, near Gibson House; at the new
Ticket Office on West side of Vine street, between the Post
Office and the Burnet House; or at the Sixth Street Depot.
D. McLAREN, Superintendent.

FREEDOM IRON COMPANY,

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods,
Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

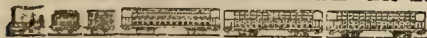
JOHN A. WRIGHT, Sup't.

This Iron is all made from best Juniata cold-blast char-
coal Pig Iron, refined with Charcoal in the old-fashioned
Forge Fire, hammered into a Bloom from which Iron is
hammered. The whole operation from ore to finished Iron
is conducted at our own Works. June 9.

New Time Table

OF THE

NEW YORK CENTRAL R. R.



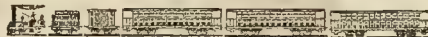
Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp. 7:10 A. M.	7:00 P. M.	7:00 P. M.
Mail 9:10 A. M.	12:50 A. M.	
New York Exp. 11:15 A. M.	9:10 P. M.	9:00 P. M.
Night Exp. 5:00 P. M.	4:00 A. M.	4:00 A. M.
Utica Accom'n. 6:00 P. M.	Ar. U. 10:00 P. M.	
N. Y. Mail 11:15 P. M.	10:00 A. M.	10:00 A. M.
Leave Buffalo.	Leave Bridge.	Ar. Albany.
New York Exp. 5:15 A. M.	5:15 A. M.	3:30 P. M.
Steamboat Exp. 8:30 A. M.	8:00 A. M.	8:00 P. M.
Mail 11:15 A. M.		2:30 P. M.
Cleveland Exp. 6:00 P. M.	6:00 P. M.	4:40 A. M.
Cincinnati Exp. 11:00 P. M.	11:00 P. M.	8:30 A. M.
Utica Accom'n.		10:00 A. M.

Commencing April 11, 1859.

LITTLE MIAMI

AND—

COLUMBUS AND XENIA



RAILROAD.

FOUR TRAINS DAILY.

Three Through Express Trains.

FIRST TRAIN—No. 1 Express, at 6 A. M., connects via
Columbus and Cleveland; via Columbus, Crestline, and
Pittsburg; Detroit via Cleveland and Steamers. This train
stops between Cincinnati and Columbus, at Loveland,
Deerfield, Morrow, Xenia, Cedarville, South Charleston,
London, and West Jefferson.

SECOND TRAIN—No. 2 Express, at 8:30 A. M., connects via
Columbus, Bellair, and Benwood; Wheeling, via Colum-
bus, Steubenville, and Pittsburg; via Columbus, Crestline,
and Pittsburg; via Columbus and Cleveland; Detroit,
via Cleveland and Steamer; Springfield. This train
stops between Cincinnati and Columbus at Plainville, Mil-
ford, Loveland, Morrow, Spring Valley, Xenia and Lon-
don.

THIRD TRAIN—Accommodation, at 4:40 P. M., for Colum-
bus and Springfield.

FOURTH TRAIN—Night Express, at 11:30 P. M.; con-
nects via Columbus, Bellair, and Benwood; Wheeling;
via Columbus, Steubenville and Pittsburg; via Columbus,
Crestline and Pittsburg; via Columbus and Cleveland
This train stops at Loveland, Morrow, Corwin, Xenia and
London. Sleeping Cars on this Train.

No. 1 Express through to Cleveland without
change.

The Night Express Train, leaving Cincinnati at 11:30 P.
M., runs daily, except Saturdays. The other trains run
daily, except Sundays.

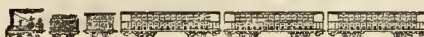
For all information and Through Tickets to Boston, New
York, Philadelphia, Baltimore, Washington, Buffalo, Niag-
ara Falls, Dunkirk, Cleveland, Pittsburg, Wheeling, and
all Eastern places, please apply at the offices, Walnut
Street House, No. 1 Burnet House, south-east corner of
Broadway and Front Streets, and at the Eastern Depot.

Trains run by Columbus time, which is seven minutes
faster than Cincinnati time.

J. DURAND, Superintendent.

Omnibuses call for passengers by leaving directions at
the Ticket Office.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE.

TERMINATES AT WASHINGTON AND BALTI-
MORE on the East, and Wheeling, Benwood and
Parkersburg on the West, at which places it unites with
Railroads, Steamers, etc., for and from all points in the
West, South-West and North-West.

Fare to New York and Boston ONE DOLLAR less than
via any other route.

TWO TRAINS

Leave Wheeling daily at 8:05 P. M., and 11:30 A. M.
Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.
Passengers by this route can visit Baltimore, Philadel-
phia, New York and Boston, at the cost of a ticket to Boston
alone by other lines.

Through tickets to the Eastern cities can be procured via
Washington City at an additional charge of \$2.

Quick time and sure connections.

Inquire for tickets via BALTIMORE AND OHIO RAIL-
ROAD, at any of the principal Railroad Offices in the West.

E. F. FULLER,

General Western Agent.

L. M. COLE,

General Ticket Agent.

W. P. SMITH, Master Transportation.

WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Mach-
inery, &c., large Cuts for Show Card, Posters, &c.
executed in the highest style of the art.

MIDDLETON, STROBRIDGE & CO.,

Jan 8-ly 119 Walnut st., Odd Fellows' Build'n

CHICAGO,

Great Western and North-Western
ROUTE.INDIANAPOLIS & CINCINNATI
SHORT LINE

RAILROAD.

(VIA LAWRENCEBURG.)

Distance 110 Miles and No Change of Cars Be-
tween Cincinnati and Indianapolis.

THREE PASSENGER TRAINS LEAVE CIN-
CINNATI daily, (Sundays excepted,) from the foot of
Mill and Front Streets, as follows:

FIRST TRAIN, 6 A. M.—Chicago and Terre Haute Day
Express—Through to Terre Haute, Lafayette, and Chicago,
with but one change of cars.

SECOND TRAIN, 4:15 P. M.—Accommodation—The 4:15
P. M. train arrives in Indianapolis at 10:10 P. M.

THIRD TRAIN—Chicago and Terre Haute Night Ex-
press—8 P. M.—Arrives at Indianapolis at 1 A. M. This
train runs through from Cincinnati to Chicago, with but
one change of cars.

The above trains make close connections at

Indianapolis, Lafayette and Chicago,

WITH TRAINS FOR

Terre Haute,	Lafayette,
Springfield,	Jacksonville,
Rock Island,	Danville,
Galesburg,	Burlington,
Keosau,	Milwaukee,
Mattoon,	Pana,
Naples,	Peoria,
Galena,	Dunleith,
Quincy,	Racine,
Prairie du Chien,	Decatur,
Bloomington,	Joliet,
Lisalle,	St. Paul,

And all towns and cities in the North-west.

Connections are also made at Indianapolis with the
Peru and Indianapolis Railroad for Kokomo, Peru, Logans-
port, Fort Wayne, Toledo and Detroit.

Be sure you are in the right Ticket Office before you
purchase your ticket, and ask for tickets

Via Lawrenceburg & Indianapolis.

THROUGH TICKETS,

Good until used, may be had at the Company's Offices,
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No. 1 Burnet House, north-west corner Third and Vine
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Also at the Walnut Street House.

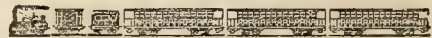
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W. H. L. NOBLE, General Ticket Agent.

Commencing May 22, 1859.

OHIO & MISSISSIPPI



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CINCINNATI AND ST. LOUIS.

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The trains connect at St. Louis for all points in Kansas
and Nebraska; Hannibal, Quincy and Keokuk; at St.
Louis and Cairo for Memphis, Vicksburg, Natchez and New
Orleans.

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RETURNING—Fast Link—Leaves East St. Louis,
(Sundays excepted) at 6:50 A. M., arriving at Cincinnati at
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POST-OFFICE GUIDE!

For Post-Masters and Business Men.

CONTAINING

A Complete List of Post-Offices in the United States
and Territories, arranged by States and Counties; A
Complete List of all Distributing Post-Offices; Rates
of Foreign and Domestic Letter Postage; Rates of
Printed Matter, Transient and Regular; Abstract
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Late Assistant Post-Master at Cincinnati.

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READ THE FOLLOWING CERTIFICATE.

U. S. BLANK AGENCY, CINCINNATI POST-OFFICE,
January, 1859.

This work has been carefully compiled and corrected by
E. PENROSE JONES, Esq., late Assistant Post-Master of the
Cincinnati P. O., from the Records in this Department, and
other sources, and contains the most complete list of Post-
Offices especially of the Western, North-Western, and
South-Western States, yet published.

MAHLON H. MEDARY,

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The entire matter is kept standing in type, and as the com-
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are 3600 more offices in this than in any book heretofore
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WHEELER & WILSON'S



SEWING MACHINES.

W. M. SUMNER & CO., cor. Fourth and Wal-
nut Streets, second floor, Cincinnati, Ohio.

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We offer the Wheeler & Wilson Sewing Machine, with
important improvements, at a reduction on former prices;
and to meet the demand for a good, low-priced FAMILY
MACHINE, have introduced a new style, working upon the
same principle, and making the same stitch, though not so
highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being alike on
both sides, impossible to unravel, and leaving no chain or
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the most successful and popular Family Sewing Machine
now made.

At our various offices we sell at New York prices, and
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Send or call for a circular, containing all particu-
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Feb 12.

1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th
Corby, Gossin & Co.'s make for sale very
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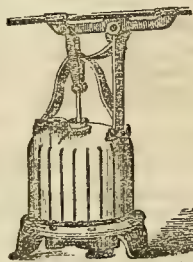
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SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



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Companies, Manufacturer
Distillers, Miners, and the pub-
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as the best Pump now in use
and acknowledged by all who
have used them to be perfect-
are simple in their construc-
tion, compact, durable and not
likely to get out of order; well
adapted for Steamboats, Rail-
road Water Stations, Distill-
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Mines, Rolling Mills, Paper
Mills, Factories, Wells, Cis-
terns, Stationary Fire Engines, Garden Engines and for
all purposes where a Pump can be used. Also, for forc-
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rapidly.

Also, McGowan's Patent Ball Valve Pump, designed
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Full and perfect satisfaction guaranteed in all cases,
when properly put up according to directions.
Orders thankfully received and promptly filled at the
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SILVER MEDAL. (The highest prize) awarded
these pumps and Steam Pumping Engine at the late Fa-
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ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE
now been fully tested in this vicinity, and it is
universally conceded that they can not be excelled.
The Roofs are wholly of Wrought Iron, or mixture of
Wood and Iron; Shoring—Always Iron.

The bridges are wholly Wrought Iron except the floor,
which is wood, like the floors of ordinary Bridges.
We are prepared to make these structures in any
quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per
foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs.
\$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100
square feet, part wood and part iron, from \$12 to \$20
per square.

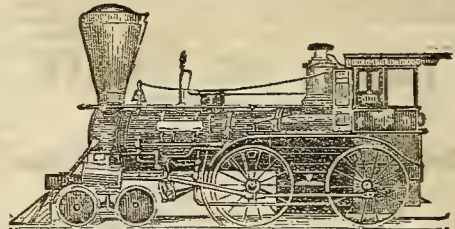
Increase of span of bridges, or width of buildings
makes an increase of price, but the increase in price is
no more than the increase of wooden structures.



We can furnish iron of every size to work into
Bridges and Roofs, and Railroads or other companies
buying the right to use them and the iron of us, can
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above prices. Our structures weigh only from 1-4 to
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our factory, 497 West Third Street, in this city, four
different specimens of our Roofs, where the public can
inspect them to their satisfaction. We beg them to
give us a call, as all our work is warranted, and we ask
no pay on ordinary jobs until the work is done and ap-
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The undersigned are prepared to furnish locomotives
equal in efficiency and durability to the best Eastern
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suitable for railroad shops. Also, all kinds of heavy
forging and casting done at short notice. Also, bolts for
bridges cut with dispatch.
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MOORE & RICHARDSON.

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P. DUDLEY.

President of the Board

Jan 5th.

The Railroad Record.

E. D. MANSFIELD,
T. WRIGHTSON, } Editors.

CINCINNATI:
Thursday Morning, July 21, 1859.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
OFFICE—No. 167 Walnut Street.

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Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

IF The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

IF Railroad Presidents, Superintendents and Secretaries, are requested to send us copies of all Annual and other Reports they may issue, together with their Monthly Statements, and such other matters of interest as they may be willing to furnish us

Southern Pacific Railroad.

NEW ORLEANS, July 12.—Advises from Marshall, Texas, to the 8th inst., state that the District Attorney has officially notified the Pacific Railroad Company, that he will dismiss the State suit, upon the payment of the first installment of \$50,000, as provided for in the compromise with the new company.

According to the census of 1850, there were in the U. S. 23,190,876 people. At the same time there were 26,842 clergymen, or one clergyman to 863 persons. But New Hampshire takes the lead in supporting clergymen, as she has one clergyman to every 490 persons. All the New England States support one clergyman to less than 600 persons. New York has one clergyman to every 722 persons. Virginia one to 1,317; South Carolina one to 1,410, Louisiana one to 3,000.

NEW YORK AND ERIE RAILROAD.—The receipts of this road, since its completion from Dunkirk to New York, have been as follows:

Year.	Passengers.	Freight &c.	Total.
1851.....	\$1,163,536	\$1,198,377	\$2,339,866
1852.....	1,399,797	2,018,929	3,318,721
1853.....	1,601,210	2,717,752	4,318,962
1854.....	1,779,742	3,580,737	5,319,979
1855.....	1,698,670	3,790,323	5,488,993
1856.....	1,676,675	4,692,315	6,342,990
1857.....	1,495,361	4,247,245	5,742,606
1858.....	1,182,358	3,969,358	5,151,616
Total.....	\$11,877,299	\$26,204,493	\$38,089,792

IF The earnings of the Erie Railroad for the month of June, 1859, were..... \$330,657 22
June, 1858..... 384,378 93

Decrease..... \$53,721 71

BANKS AND BANKING.

There is a curious fact, just at present, in the business relations of the country, which should receive more thought and attention than it does. This is the strong contrast between the profits of banks and railroads. Banks we hold to be one kind of useful machines; useful for purposes of commerce and exchange; and not to be maliciously warred upon, because they are banks. But, the railroad is a far more useful machine. It creates ten times the business; it pays ten times as many people; and it deals with the intercourse and industry of mankind. The world could better do without banks (we mean banks of circulation)—at the present period, than without railroads. Yet when we come to the profits of investment, in these two machines, we find a remarkable contrast the other way. The banks are very profitable in the average. The railroads are not, although there are many exceptions. It may illustrate the subject of investments to examine into the reasons of this difference.

1. The public *lend* the banks a vast amount of money without interest.

2. The expenses of the banks in the management of this money are comparatively small. The entire expense of a country bank is not equal to that of one office in some of our railroads!

3. The bills of credit of a bank are received as money, while those of a railroad will not pass at all.

4. The expenses of a railroad are in their very nature immense.

5. The single advantage a railroad has, is in charging directly for its services, and as those services must be performed, it is sure of getting something for its work.

6. But, on the other hand, if its services do not reach a certain amount, it can not even pay its expenses; while the bank will pay its expenses on a very small amount of business. It is plain, then, that banks have very great advantages—in making profits, and that this advantage is entirely caused by the *credit given by the public*; and the power given by law, to use that credit. As an example of the effect of public credit given in this form,—we may instance the banks of Kentucky. They are very profitable. So much, that one of them recently divided 25 per cent, and all of them make large dividends. If we look into the causes of this, we find that the Kentucky banks make money on the credit given them by the people of Ohio and Indiana. Ohio has about 2,500,000 people. Kentucky about 1,000,000. But, Ohio has about half enough banking capital, and Kentucky about double as much as she needs. The result is Kentucky bank notes are found everywhere throughout Ohio and Indiana; furnishing a large portion of the currency. New banks are not set up in Kentucky every year, which are not needed there; but, are used by moneyed men as ma-

chines to make money, by the *credit given them in other states*. The same thing is done in Connecticut, Massachusetts and Virginia.

In order to understand something of the mode in which banks make money, let us take a practical example. Banks get credit for their circulation, new deposits, and even their stock and exchange;—for, it may be and often is, that a part of the stock is paid for in notes; but supposing every thing is paid up, let us see the course of bank operations. We have before us the return of Ohio banks for 1857, and we take the Chillicothe bank as an example. This bank gets *credit* with the public for \$354,279 of its own notes; and \$171,746 of other people's money. In other words it gets *credit* for \$526,025. Its capital is \$250,000, and the whole amount of money at its command, is, therefore, \$776,025, which is *three times its own capital*. To protect itself against sudden demands, it keeps in gold and certain deposits, \$111,000; pays \$40,000 to the Safety Fund, and has \$60,000 more in property. It loaned \$563,777 to make a profit on. A common note, which is the form of the smallest loans, bears 6 per cent; but, Bills of Exchange bear 10 to 12 per cent. It will be safe to say, that the bank received at least an average of 8 per cent on all its loans. This gives \$45,000 income. For expenses, it will be a large amount to say \$8,000. The *net* profit of the bank on a capital of \$250,000 is \$37,000, or 15 per cent. Now, we know nothing of what dividend that bank did declare, but we unhesitatingly say, it *made* 15 per cent,—casual losses excepted. Other banks may not have made so much; but, we think, that even in Ohio, banks have been very profitable. In this state banks are much restricted in their issue of notes; but still have license enough to make large interest on their capital, if they can keep their notes out.

There is one element of banking in this country which operates directly against the interest of the people, and directly in favor of the banks, and is one great cause of the bank failures. This is, that bank notes *circulate the easiest where they are a little below par*, and consequently if a bank can circulate its notes *at a discount from home*, it can circulate a great deal more. The reason of this depends on a common and well-known principle of human nature. A man will always pay for an article *in the cheapest currency*. If A has a note of Chicago at 2 per cent discount, and one of St. Louis at 1½ discount, and one of Ohio at ¼ per cent, he will pay for his marketing to B with the Chicago note. B on receiving it will do the same, so long as those several notes are redeemable at home. If they were not, neither would be taken. If a bank, therefore, be careful to keep up its credit, and can get its notes at a distance, it may put a very large proportion out, from the simple fact, *that they are depreciated by distance*. It is obvious also, that this whole depreciation falls on the people, while the pro-

fit goes to the banks. It is plain, therefore, that we have not arrived at the ultimate point of human wisdom in regulating banks.

Since we can not have a financial center for the Union, we ought to have one for each considerable state. The banks should be made to redeem their currency at the commercial center of the state, and all the state debts and state interest should be paid there too. This would not interfere with the general rates of commercial exchange; but would save a great deal of brokerage, and bring our financial affairs to their proper place of business—at home.

RAILROAD ACCIDENTS.

It is astonishing how the public mind becomes reconciled to things that strike it with horror on their first recital.

A murder in Vermont is a thing to be talked of for years, to the extent of a day's journey in every direction from the scene of the murder. In New York, Baltimore, New Orleans, or Cincinnati, we look for their announcement daily, as we do the price of whisky; and unless the slain be a personal friend, with as little interest as is the price of whisky to one who is not a dealer in the article.

The same is true of burglary. From being horrified at the atrocity of breaking into a house and stealing the plate and jewels of some gentleman, we become to read the accounts of the preceding night's demonstration, more to admire the ingenuity of the burglar, than from any fear or alarm that they are getting too prevalent.

Knocking a man on the head with a slung-shot and taking his watch and wallet, in the open street, was rather startling when the science was new, but it soon became a thing of course, and "garroteing" became a standing head line for daily paragraphs—the interest being changed from the novelty of the thing to the novelty of the subjects and places of performance—instead of a "drover known to be in possession of a considerable sum of money," we had mechanics returning from their work robbed of "a silver watch and some change," or a servant girl robbed of the marketing at the door.

* Defalcations and forgeries break out now and then with an exhilarating flourish, and the public stare in astonishment at the display of caps and exclamation points—the details running into a perfect epidemic of defalcations and forgeries. The public become educated to the cunning details of the performance and discuss not the crime and its punishment, but the smartness of the offender in hiding his offence so long, or the cuteness with which he covered his tracks in the performance.

So too, of the details of an execution, they are dwelt upon with that particularity that takes from the lesson of punishment all its force, by substituting in the public mind the bearing of the culprit, the length of the rope,

the manner his hair was parted, the appearance of the priest, and the military company that acted as guard on the occasion.

When the news of a "skirmish" was telegraphed from the armies every body said "what suffering this war will produce"—but a battle is fought—another is in contemplation—"two days later news" tells us that "fifty thousand men are left on the field," and the subject changes from that of the horrors of the death, and carnage, and suffering, and mourning, incident thereto, to that of the bravery of the officer who "carried the center," or the one that "sustained his position so gallantly"—and the statician sets to work to show the public that it was proportionably less destructive by two and a half per cent than has been some other battle.

The contemplation of those awful scenes of destruction instead of making the world stand aghast at the slaughter, seems to arouse a disposition to go to war and do like slaughter.

The philosophy of the thing is as easily explained, perhaps, as why an old rake is the best husband, an old Whig makes the best Democrat, or an Awful Gardner a more grace-abounding convert to the religion he had so long opposed, and the principle is thus explained by Pope:

—familiar with its face,
We first endure, then pity, then embrace.

That which horrifies us beyond measure, "seen too oft," becomes an associate which we can not dispense with, and we are dissatisfied if the horrible is not as progressive as anything else.

So with railroad accidents—running over a cow and killing an engineer, smashing up the engine, and demolishing a baggage and first passenger car—is as common place and stale—as much to be expected every day, as that a man found guilty of murder should have a new trial and be cleared.

And the "no blame attached" has become entirely unnecessary in all such cases—it is only when a whole train runs into a culvert and it takes a week or two to find all the bodies, that some philosophising being gives expression to the thought that somebody is to blame, and the law ought to hold them so.

Continued oppression and crime sometimes brings reaction—may not reaction take place in regard to some of the many crimes against society which we have been educating ourselves to look upon with unceasing endurance? And when the reaction does come will it stop at the point where safety to the community and the best interests of those "not to blame" would stop it?

It is not many years since holding a railroad company responsible for damages done to persons by accidents on their roads was a novelty. How many companies have already found it more expensive than would have been the caution of preventing the accidents they have paid for? Law is progressive, especially against bodies that are soulless.

THE WAR IN ITALY--DOES IT TEND TO FREEDOM?

The sympathy of Americans will be incontinently given to whichever side of the struggle appears to favor freedom, or opposes itself to despotism. Hence, ours is on the side of Italy in the present strife, because Italy contends for freedom from a foreign despotism.

Does the struggle give any just ground for hope of a better condition to the masses of Europe, or even to Italy herself, in the future? A struggle that calls forth the entire energies of a people—that enlists the feelings, and arouses the passions of every man, woman, and child in the land—that takes the laborer from the field and shop—that consumes everything and produces nothing—that demoralizes with the power of armies and flow of blood, is not likely to leave the people in a condition to pay much attention to the question of human rights, and liberal or constitutional government. To find the means of existence will claim their attention for a long time after the armies have ceased their conflict.

Besides, such a conflict uses up the mass of earnest, energetic men, who move in reform matters, far more than it does any other class. The timid, the aged, the very young, the feeble in body and intellect,—all decrepid and conservative men who leave those to govern who may, are those who are left after such a war, and they are those who prefer the old rule of "Divinely established" kingly power, to any government that requires either thought or action on their part.

A depleted nation, exhausted in men, treasures, and morals, as a nation must be that is trodden by the blighting feet of two such armies as those of France and Austria, is like a candle burning at both ends; the one flame goes out only as the other reaches it,—and when one of the despotisms drives off the other, the thing saved—the country—the government of Italy belongs to its deliverer by every rule of conquest or precedent, and must be dictated to, as to their future, as certainly as if the liberating power had fought and conquered the Italians instead of the Austrians.

Will exhausted Italy be better off when its rule is dictated by Napoleon, than was unwasted Italy when ruled by Francis Joseph? Italy will be under a debt to France, which it will take Italy to repay.

Have human rights anything to expect from the parvenue Emperor? will freedom rear its altars and burn its incense under vassalage to the throne of France?

Had the Lombards themselves arose in revolt, and claimed the assistance and sympathy of the rest of the Italian States, and even that of France, they then might have made a claim to self rule, and the world would have accorded them propriety in their claim,—

"—Who would be free,
Themselves must strike the blow."

It is not the fashion of crowns to expend armies and navies in fighting, unasked, for the

liberties and rights of those who desire to rule themselves.

Has the twenty-five thousand men, just crushed out, in the battle of Solferino, increased the prospect of bettering the condition of the people of Austria? and has the twelve thousand stalwart men, whom France lost there, increased the chances of greater freedom in France? will the commingled blood and bones of those thirty-seven thousand men bring to the soil they have mixed with, a growth of liberal ideas, or principles of human rights? Did ever Freemen spring from the dust of self-slaughtered despots or their slaves? Whether the upper or nether stone be broken in the collision, the substance that called them together is to be ground up between them.

We may hope for good results to the oppressed of Italy, but the chances are those of the wounded and prostrate hare, whilst the wolves are fighting for his possession. The need of the victor for the substance fought over, is all the greater, because of the exhaustion the contest has produced, and will the winning wolf give freedom to the hare, after having famished himself to get possession of it?

'Tis the active blood of those who would be free, that flows out in the battles—the coward hearts beat strongest when the battle has ended, and cowardly oppression assumes the rule, and boast of "order."

K., MT. P. & M. R. R. CO.

PRESIDENT'S REPORT.

In conformity with the 6th Section of the Articles of Incorporation, it becomes our duty to lay before you a statement of the action of your Directors, and an exhibit of the condition and operations of the Road, for the past fiscal year. At the last annual meeting it was stated that the construction and operation of the Road had, by contract, passed into the hands of lessees, who had obligated themselves to complete and equip the Road to Mt. Pleasant by December, 1859, on what were supposed to be equitable and safe terms. The country, at that time, throughout its whole extent, was paralyzed by great financial distress, and, in consequence of the suspicion with which Western, and particularly Railroad securities were held, your Board both entertained and expressed apprehensions of an energetic prosecution of the work, under the contract then in force. The pressure of the times was sufficient to suspend operations on works of less magnitude, supported by more available means. The distress resulting from the commercial embarrassments of the country, have been the more protracted and seriously felt in this State, in consequence of what may be justly termed a failure of crops, for three successive seasons, and a consequent inability to maintain the credit of its pecuniary obligations. In time of general prosperity, there

would, in all probability, have been no difficulty in disposing of municipal and R. R. Bonds; and from the revenues arising from them, together with the private subscriptions, belonging to the Road, the work might have been pushed forward to a successful and speedy issue. Other causes, in addition to the financial panic of the past two years, have materially operated to embarrass the Contractors, and retard the work. Your Board of Directors became satisfied that the Contractors and Lessees of May 13, 1857, could not command the material aid, attached to responsible credit, sufficient to prosecute the work, and the distrust, and generally existing commercial embarrassments, utterly forbade the hope of realizing that aid from the assets of the Company. The payments of subscriptions by individuals were slow, and comparatively small, and the failure of some counties and corporations of the State to meet the interest on their Bonds, threw distrust upon all. Nor can we be surprised that the securities held by this Road do not command a ready sale. No faith in their value will be of any avail, when unsupported by efforts to maintain their credit.—Indifference is no far remove from open repudiation. It may truly be urged that the failure of crops destroyed the ability, on the part of many counties and cities, to protect the credit of Bonds issued in good faith. The bondholder no less than the tax-payer can make due allowances for public calamities—but the occasion the more earnestly demands a recognition of the obligation assumed, and a determination to use all efforts to meet that obligation. This omission has borne its legitimate fruit. We still hold our confidence as to the integrity of the counties, and an acquaintance of the facts will fully explain the causes of failure to meet maturing obligations—but these are no extenuation of any action, or want of action, which may give rise even to a conjecture of repudiation. Good faith, and an effort to do, and a disavowal of a spirit of indifference, will make any city or county strong, and give and maintain credit, character and wealth.

It is hoped and believed that the determination to faithfully abide by the obligations solemnly entered into, exists, and that on the return of prosperity, the intention will be fulfilled to the letter. The indications are all around us, of returning prosperity. Both Lee and Henry Counties, and the City of Mt. Pleasant, have recognized their obligations: taxes levied and being collected as rapidly as can well be done.

At a meeting of the Board of Directors held in March last, information was received of the dissolution of partnership between John Templin and John H. Sullivan, Contractors and Lessees of the Road, under contract of May 13, 1857, Mr. Sullivan retiring, and Mr. Templin assuming to prosecute the work under the contract. Your Board had become fully satisfied of the inability of the Contractors to push

forward the work with a due degree of speed, independently of the sale of the securities of the Company. The Bonds in the possession of the Road, might have been forced into the market, but the means resulting from this process must, necessarily, have fallen far short of the amount required to complete the work, and in embarrassing the Contractors, have destroyed the hope of the road. The dissolution of the partnership existing under contract of May 13, 1857, was readily concurred in. On March 14, 1859, the contract with Mr. Templin of May 13, 1857, was amended by certain modifications in work, time and payments, mutually advantageous to the Contractors and the R. R. Company, and Mr. Joseph Chamberlain, of Cleveland, Ohio, and Russell Plummer, of New Jersey, united with Mr. John Templin, under style and firm of Templin, Plummer & Co.—The material features of the contract are, that the Road shall be completed to Mt. Pleasant by December, 1860, and to Columbus City by 1862,—the Road to be properly drained, bridged, ballasted, and equipped, for which, payment is to be made per mile, lineal measure, in the individual subscriptions, and in Municipal, County and Mortgage Bonds on the Road. The residue remaining unpaid on the completion of the contract, to be paid in Second Mortgage Bonds. In consideration of the extension of time, the price was reduced \$1,000 per mile, and the promise of an additional Mt. Pleasant subscription of \$50,000, and Keokuk City subscription of \$75,000, released. By the new arrangement, the construction of the Road for its entire length is contracted. Estimates of work done by the Contractors are to be made quarterly, *pro rata*, by the Engineer of the Contractors, approved by the Engineer of the R. R. Company, and when so approved, to be placed to their credit on the Books of the Company. A payment of \$2,000, to be made annually, by the Contractors, in consideration of the use of the Road. In other respects, the contract corresponds with the contract of May 13, 1857.

Your Directors are satisfied that the Contractors are responsible, energetic men, and experienced in Railroad matters. As a consequence of the causes before enumerated, Municipal Bonds have either no sale, or are held in the stock market at nominal rates, and prudence demands a cautious policy in the issuing of Mortgage Bonds. The Contractors are, consequently, thrown upon their own resources in the prosecution of the work, and have received an extension of the time in order that they may not be compelled, by any casualties that may occur, to make heavy sacrifices on the Bonds received by them, the certainty of success being deemed of more importance than a doubtful haste. There is no presumption, however, that the completion of the Road will be delayed until the time specified in the contract. The Contractors have already given an earnest of its faithful prosecution. A portion of the iron has been receive

ed, and shipment of balance sufficient to lay the rails as far as the "Fort Madison Junction." An agreement was entered into with the Fort Madison R. R. Company, granting to that Company the use of the Mt. Pleasant Road, from the Junction to Keokuk and West Point, from which latter place the Fort Madison Road is to extend westwardly, on terms to be agreed upon by the parties, or determined by referees. The Road will probably be completed and in operation as far as the Junction, by the end of July, and to West Point in October. The construction and equipment of the Road, thus far, including the payment of outstanding liabilities, will be attended with an expense of over a hundred thousand dollars, which, on account of the inconvertibility of the R. R. Bonds at a reasonable figure, the Contractors must raise from their own resources. Common prudence demands the concentration of their force at a point where it may be made available at as early a day as practicable, and from the operation of a finished division of the Road, give a character to the Bonds to which they are justly entitled, and be enabled the more safely to push forward the work. This course is rendered the more imperative from the fact that, in consequence of the long continued high waters, the receipts of the first Division of the Road in operation have been very light.

A statement is herewith submitted showing Receipts and Expenditures of the Company from date of organization to June 1st, 1859.—The Books are in the hands of the Secretary of the Company, who is instructed to exhibit the same to Stockholders or others interested, or to transmit statements of special accounts when desired by parties concerned.

Receipts and Disbursements of the K., Mt. P. & M. R. R. Company from date of organization, to June 1, 1859.

RECEIPTS.

From Capital Stock:

Keokuk City Bonds.....	\$100,000
Lee County Bonds.....	150,000
Mt. Pleasant City Bonds.....	50,000
Henry County Bonds.....	100,000
Louisa County Bonds, (to be issued,).....	50,000
West Point Town Bonds, (to be issued,).....	10,000
Individual Subscription.....	88,916 30
Bills Payable, (due 1857,).....	6,100
Bills Payable.....	300
Mortgage Bonds.....	414,000
Amounts to the credit of sundry persons, being claims for settlement on final account.....	18,289 08
Transferable and Preliminary Certificates.....	1,572 70
Stock due Contractors on Estimates.....	15,104
Domestic Bonds.....	3,000
Income Account.....	16,186 30

\$1,022,668 47

DISBURSEMENTS.

Construction Account, which includes Engineering, Superstructure, Grading, Bridging, Rolling Stock, Dis. on Bonds, &c.....	\$741,703 18
Salaries of Officers.....	4,000
Real Estate.....	16,730
Right of Way.....	14,906 16
Balance on hand.....	245,329 13

\$1,022,668 47

Statement showing in what the balance of

\$245,329 13 consists:

Bills Receivable.....	\$400 10
Amounts to debit of sundry persons, Bonds on hand and to be issued.....	219,452 57
Subscriptions in arrears.....	25,446 46

\$245,329 13

The Officers of your Road, under pay, are, a President, and a Secretary, who also performs the duties of Treasurer, and an Engineer. The duties of the Engineer are to inspect the work done under the contract, and to approve or reject the same, and certify as to the correctness of quarterly estimates of work. As the time occupied by the Engineer will necessarily be at stated intervals and limited, he has been employed according to the number of days he may be engaged.

It is unnecessary, at this day, to argue the importance of Railroads. The City or County removed from the advantages attending their operation, must fall behind other cities and counties, in the train of material benefits which they bear with them where their facilities are enjoyed. Nor is it necessary to present the especial advantages to result to the region through which this Road passes. These advantages were fully canvassed at the time the enterprise was undertaken. The utilities to be derived now are the same as then, with the additional incentive to renewed effort that the country may not have trifled away a heavy expenditure:—counties, cities, and individuals incurring onerous debts, with no corresponding hope of success. The Contractors, by the large investments which they, unavoidably, are required to make in pushing forward the work, may reasonably expect the cordial cooperation of all parties interested, to maintain the character of the securities by which the Road must be built. Your Board can not pass by the present opportunity without especially commending the spirit of the City Council and Citizens of Mt. Pleasant, in the resolution and endeavors to meet the interest on their R. R. Bonds. The times have prevented any endeavors to collect installments of stock largely in arrears. An abundant harvest, now in prospect, will tend to restore public confidence, and with the faithful observance of pledges given, there need be no conjectures in regard to an early completion of the road.

DIRECTORS.

Ralph P. Lowe, William Patterson, Charles Parsons, D. W. Kilbourne, Smith Hamill, J. M. Shelly, Keokuk; C. N. McDowell, John B. Lash, Robert Wilson, Laurin Dewey, Mt. Pleasant; Francis Springer, Columbus City.

OFFICERS.

Laurin Dewey, *President*; John W. Ogden, *Secretary and Treasurer*; Guy Wells, *Engineer*.

SPRINGFIELD, MT. VERNON AND PITTSBURGH.—Wm. Dunbar, Esq., President of this road, which by its junction with the Pittsburgh, Fort Wayne and Chicago, at Lakeville, is to afford a fifth or sixth route between Cincinnati and Pittsburgh, states that he has just received a letter from the agent who was sent to Europe to purchase iron for the road. The letter is dated London, July 1st, and states that the iron was then all purchased, and in thirty days from that date, would be shipped for the United States. Mr. D. says that the contract for the iron being closed up and fully completed, the completion of the S., Mt. V. & P. R. R., at no remote period, may safely be regarded as a "fixed fact." It will be remembered that the section of this road between Springfield and Delaware has been in operation for several years.

THE PANAMA CANAL.

(Concluded.)

The plain of Tarifa, or the country behind Tehuantepec, between that city and the river Guasacola, is 660 feet above the ocean. The elevation of the summit at Rancho Chiquito, through which Mr. Squire has laid his railroad, in Honduras, is much greater, being 3,000 feet high, an elevation not attainable by a railroad, but quite impracticable for a ship canal. As to the line proposed along the course of the Atrato, and which has been urged with some warmth, it should no longer be thought of, it is impracticable. Until there is some new route discovered, which is not likely, though not absolutely impossible, in parts of the isthmus yet unexplored (and there are portions of it which are as unknown in Europe as if they were in the centre of Asia,) the advantage of the lowest summit rests with Nicaragua, and for a ship canal this is the most important consideration.

The third requirement, that of a safe and spacious harbor on each ocean, is found in Nicaragua. On the Atlantic coast, the canal terminates naturally at the port of San Juan, lately called Greytown. This port is good, though not remarkably so, being well protected from the N. E. wind, the most dangerous in this region. On the Pacific coast there are many good harbors, besides that of the Realgo, which is of great size, and which the historian Juarros declares to be the best in all the Spanish domains of his time, when they included, besides the Peninsula, the greater part of the continent of America, with its numerous archipelagoes.

This opinion has never been contradicted. Capt. Sir Edward Belcher, of the English navy, who explored this country in 1838, speaks of the port of Realgo in terms justifying the enthusiasm of Juarros. In this particular, the line by Panama, the only one, I repeat, which can be compared with that of Nicaragua, is less highly favored. On the Atlantic, the harbor of Portobello is too far off; that of Chagres, which naturally presents itself, is inadequate in many respects, but its true recourse may be had to Simon Bay, which is near. On the Pacific, we cannot count on the harbor of Panama, which no longer exists, ships being obliged to anchor in the bays of the Pearl Islands, some miles distant. An artificial port must be built here. On this point M. Garella has furnished some hints, which should be followed out, and the whole subject specially investigated.

As regards the local population, and resources for carrying on the work, Nicaragua leaves nothing to be desired. Along this line are cities containing twelve, twenty, and thirty five thousand inhabitants. The country, covered with villages, is fertile enough to support an army of laborers. Messrs. Rouhand and Dunatrey have mentioned tracts of land that have yielded four crops of maize in a year. There is nothing like this on the Isthmus of Panama, properly so called. There the country between the two oceans is almost uninhabited, with the exception of a small number of ranchos, peopled by a few herdsmen, and it seems destined to continued sterility on account of the deadly miasma rising from the stagnant water of its marshes. In Nicaragua, the horrible yellow fever, which rages with such fury around Vera Cruz, on the pleasant shores of Cuba, and on the plains of New Orleans, is not known. That inveterate fever, to which travelers are exposed, even when remaining but a short time on the

Isthmus of Panama, is hardly known in Nicaragua. All the energy, which distinguishes the citizens of the United States, was required to complete the Panama Railroad, whose importance I would not depreciate, but which, in comparison with a ship canal, is after all but a small affair. The obstacles the builders of the road had to surmount, in bringing a corps of laborers into the country, and in keeping those whom they had brought, at great expense, from the United States, and whom the fever demoralized and decimated, would have disconcerted less determined men. Difficulties of this kind will not be met with in Nicaragua.

From this rapid exposition of local circumstances, we can form some idea of the cost of constructing the ship canal of Nicaragua, as compared with other works which have been designed and completed. The two divisions of the work, upon which it may be useful to fix our attention, are—

1st. The construction of a canal along a part of the River St. Juan, running from the lake to Greytown.

2d. The excavation of a trench by which the lake may be put in communication with the Pacific Ocean.

Examinations of the course of the San Juan, and the land bordering it, made by different persons, justify the opinion that the canal, which will not, by a great deal, be required through its whole extent, is but one of those enterprises for which the art of the engineer is perfectly prepared, and which will not involve an exorbitant outlay. But the trench between the lake and the Pacific, rises, it must be confessed, above the class of ordinary works. It has been seen that the minimum summit, between the lake and the Atlantic, is not less than 132 feet, to this must be added 26 feet for depth of canal. A cutting of 158 feet, however short, is a great affair. It is true, even before the new era of public works opened by railroads, men have resolutely undertaken tasks of this kind, and have come off triumphant. The most remarkable of these is the canal made by the Spaniards in the seventeenth century, near the city of Mexico, to lower the waters of some lakes, which threatened to submerge that fine capital. From exact information, obtained on the spot by Humboldt, we learn that the cutting of Nuechueta, made for this purpose, was from 150 to 200 feet deep for half a mile, and from 100 to 130 feet for more than two miles; the total length of the cutting being thirteen miles. The proposed cutting between Lake Nicaragua and the Pacific presents nothing more formidable than this, though the ship canal must be of much greater dimensions than that of draining the plain of Mexico.

Thirty years ago, during the construction of the canal from Arles to Boue, a trench was cut through the Plateau de la Leque from 130 to 165 feet deep, for a distance of $1\frac{1}{2}$ miles. It is true that there the canal is reduced to a width of 23 feet, and the ship canal must be at least three times as wide, supposing it restricted at these points to a width necessary to pass one ship. But if we reflect that the Mexican canal was made by rough and barbarous implements, and that at La Leque even, old fashioned means only were used, we can readily admit that the Nicaragua Canal may be included among those enterprises which offer a fair chance for success, now that engineers can avail themselves of new instruments of superior power for moving material. Not only can the locomotives and the railroad be used, but, in general, the art of working deep excavations has been enriched by va-

rious mechanical contrivances, for the saving of time and money. Thus, unless the cutting, to be made between the lake and the Pacific, strikes ledges of very hard rock, as basalt, porphyry, or trachytes—and it is not unreasonable in these volcanic regions to fear what geologists call *intrusions*—or unless the work encounters a sliding material, which would be worse than granite or basalt, there is no need of making a monster of it. Our engineers will be able to cope with it.

Following the line indicated by M. Belly, we shall meet, according to his observation, with nothing but slate and limestone. Whether this last is peculiarly hard, or whether the *dip* of the slate is such as to give rise to slides, we are not informed, but these facts can be determined by the sinking of pits.

This cutting of about 165 feet for a distance of three or four miles, is the difficult, and, to a certain extent, the doubtful part of the undertaking. But we should bear in mind that this cutting may be greatly lessened by increasing the length of the canal, extending it through the Lake Leon, Managua, which is above Lake Nicaragua, and connected with it by a river easily made navigable. Between this lake and the Pacific, the ground is quite low, as travelers from the seventeenth century to the present time have reported. The Emperor of the French, when undergoing the mysterious discipline imposed upon him by Providence, occupied his lonely hours in the Castle of Ham with study and meditation, and produced, as is well known, the best publication that has yet appeared on the subject of the Panama Canal. In this work, which the *Revue Britannique* copied entire in 1849, the illustrious author does not hesitate to give the preference to the line through the Lake of Leon. One great advantage possessed by this line is the fact that it can be brought out at the excellent harbor of Realgo.

The summit level between the lake and Realgo is only about fifty-six feet above the lake, twenty-six feet being added for the depth of the canal, the maximum cutting is reduced to eighty-two feet, about one half the depth required on the line pointed out by M. Belly and Thomas de Gamond, which, starting from Lake Nicaragua and passing through the Valley of Sapoa, joins the Pacific at the Bay of Salina. Now it is well known that, in works of this kind, every increase in depth of cutting increases the expense in much more than direct proportion.

Matters of policy have compelled the governments of the country with whom M. Belly has treated, to accept the line to which public attention has been directed by him and Thomas de Gamond, but this may be changed hereafter, express provision for it having been made in a special clause of the treaty. The question of exact location is left open, to be decided by more careful investigations, which are now being made; for in this particular the Panama Canal is much less advanced than that of the Suez, plans for this last, both general and in detail, having been prepared under the direction of engineers of the first class, in consultation with some of the most eminent practical men in Europe.

The length of the canal, following the Sapoa line, will be—along the channel, or by the side of the River San Juan, 109 miles; across Lake Nicaragua, $48\frac{1}{2}$ miles; thence to Salina Bay, on the Pacific, $13\frac{1}{2}$ miles; making a total of 171 miles. If the canal is to be brought out at Realgo, after passing through Lake Leon, it must, on leaving the San Juan River, cross the Lake Nicaragua for 87 miles, follow the course of the Tipitapa for 20 miles, cross Lake Leon for 38 miles, and descend to

Realgo, a distance of 29 miles; making a total of 283 miles. As far, however, as we can judge from information now before us, the cost on this line will be less than that on the first, work being required only for a distance of about 160 miles, the lakes and rivers being navigable for the remainder. There are already in existence canals of a greater length than 283 miles. The Southern Canal, and the lateral canal of the Garonne, forming together one system, are longer than this. The Erie Canal, which, in the United States, is justly called the Grand Canal, is 365 miles long; and there are others that could be named.

In time, if the line to the harbor of Realgo be adopted, the Nicaragua Canal may be classed with other public works. It will not cost more, it will cost even less, than some of our lines of railroad; less, for example, than that from Paris to Lyons, which is good stock. The revenue must necessarily be very great.—The commerce, which in a few years this canal will furnish passage to, seems almost illimitable. Statistics show that the interchange of commodities between Europe and the basin of the Pacific Ocean, and between the east and west coasts of America are already greatly developed, and yet the progress made is as nothing compared to that promised by the future. Now that Christian civilization is gaining an entrance into the empires of China and Japan, is extending its power over the populous regions of India and its dependencies, is colonizing with its children the rich and vast archipelagoes of the Pacific; the commerce which the canals of Panama and Suez will minister to, attains to unheard-of dimensions. I shall not pretend to estimate it, but would refer the readers to the calculations of M. de Gammond, who has shown throughout his work great judgment in this particular. I would also ask the reader to estimate the population, and the variety of natural and manufactured productions of the country connected by these canals, and to ask himself what must be the commerce that will spring up under the ever-increasing need of production and exchange which affects the whole human race.

The bearing of politics upon this canal must now be examined; that is, how far will it be supported or opposed by the different maritime powers.

We have now to examine the ship canal through the Isthmus of Panama in its Political aspects. I do not mean by this that I shall attempt to unfold the changes it will bring about in the political balance of the world. My aim is not so high. I seek only to discover if there be any of the maritime powers whose interests, real or supposed, may be opposed to this enterprise, and how far it may, in consequence, be retarded or thwarted.

I say the supposed, as well as the real, interests; for we take warning from the Isthmus of Suez. Yielding to illusions or prejudices, or to the suggestions of an irritable vanity, States sometimes resist that which is useful to them with as much obstinacy as that which tends to their destruction. Have we not seen the government of Great Britain, represented in succession by two cabinets of different politics, that of Lord Palmerston and that of Lord Derby, who is still in power, heap up declarations upon declarations, I might say, sophisms upon sophisms, against the project of the Suez Canal; which is notwithstanding, destined to facilitate for England the administration, the commerce, the defence of her vast Indian empire.

But the Suez project has not been shaken by the somewhat rusty thunderbolts of Lord Palmerston. It stands good, with equal assurance,

against the arguments, remarkable as coming from a man of so much talent, brought to bear against it by the present Chancellor of the Exchequer, Mr. Disraeli. But the Isthmus of Panama has been more fortunate, having been spared even these assaults, in which more powder is wasted than harm done. The representatives and organs of the whole maritime world have not only given it their sympathy but their approval. The human imagination, fruitful as it is in creating phantoms, has not yet conjured up even a seeming interest opposed to the junction of the Atlantic and Pacific Ocean by a ship canal.

England and the United States, the extent of whose commercial marine places them, by a long interval, in the first rank of maritime powers, have shown their earnest desire to have a ship canal through the Isthmus of Panama; not, however, to the exclusion of railroads distributed from point to point, as that from Panama to Chagres, already open; that of Tehuantepec now being built; and that of Honduras, which Mr. Squier, a man of remarkable activity and talent, has been for some years advocating. England and the United States have many motives impelling them toward the basin of the Pacific Ocean. Both have great possessions there. The one has Australia with all its dependencies, and British Columbia, an immense province still unsettled, but where it is said gold mines of exceeding richness have been discovered, which will soon draw there a large population, for mines of the precious metals have an irresistible attraction for man. The other has California whose progress is a miracle, to which the Mexican province of Sonora, also famous for gold, seems soon to be added, which once in the hands of the North Americans, will furnish as much gold as the streams of Sacramento and San Joaquin.—For both these nations, this canal would be the opening of China and Japan, and in a still higher degree, of the west coast of America, comprising the republics of New Granada, Ecuador, Peru, Bolivia and Chili to their trade, as well as a part of Mexico. Fully persuaded of the benefits of this canal to the commerce of the world, these two powers, at first looking upon each other as rivals, have each sought to secure an exclusive influence in Central America, or rather in the basin of Lake Nicaragua, in order to control this passage. Led by the power of good sense, no less than by the force of mutual opposition to a clearer understanding of their common interests they signed, in 1850, a treaty, called after the two statesmen who negotiated it, Mr. Clayton on the part of the United States, and Mr. Bulwer for Great Britain, the main object of which was the establishment of this canal. The official title of the treaty indicates this clearly, being "A treaty for the purpose of facilitating and protecting the construction of a ship canal between the Atlantic and Pacific Oceans." The preamble of the treaty declares that the canal referred to is one to be constructed in the Nicaragua basin. It is proposed, it declares "to fix the views and intentions of the high contracting parties in relation to certain projects of communication by means of a ship canal, which may be constructed between the Atlantic and Pacific Oceans, by way of the River San Juan, and by one or two lakes of Nicaragua and Managua, ending in a port, or in any other way, on the Pacific Ocean."

Then follows the eight articles composing the treaty, all of whose stipulations develop merely the same thoughts; that is, the canal once constructed shall be held neutral, and to facilitate its construction the two governments grant to it their protection, and will exert all

their influence. The third article is in these words:—

"Persons, with their property, employed, or to be employed, on this work, shall be protected, from its commencement to its full completion, by the governments of the United States and Great Britain, against all unjust detention, confiscation, seizure, or violence whatever."

The fourth article says:—"The contracting parties will employ all the influence they can respectively exert with the States whose governments possess, or claim to possess, any power or right whatever over the territory crossed by the canal, or near any waters it may be advantageous to make use of, to induce these States or governments to aid the construction of this canal, by all means in their power; and, in addition, the United States and Great Britain agree to employ their good offices, in such place and manner as may seem expedient, to secure the establishment of free ports, one at each terminus of the above mentioned canal."

Finally, the 7th article is as follows:—"As it is desirable no time should be lost in the commencement and construction of this canal, the governments of the United States and Great Britain declare that they will give their support and encouragement to such persons or company a shall first offer to carry on the enterprise, provided it gives evidence of the possession of the needed capital, the consent of the local authorities, and such conditions and elements as are in harmony with the spirit and objects of this treaty."

This 7th article, as we see, secures the good will of the two great powers to the enterprise of M. Belly, in virtue of a well conceived treaty he has signed with the governments of Nicaragua and Costa Rica.

The British Minister for Foreign Affairs, Lord Malmesbury, with an earnestness that does him honor, has notified M. Belly, in a letter since published, of his intention to confer upon him the benefits of the Clayton-Bulwer treaty. Assured of the true meaning of a publication of M. Belly, in which the misdeeds of certain individual citizens of the United States seemed to be laid to the charge of the American nation, and being convinced of the earnest desire felt for their active co-operation, the United States will, we doubt not, follow the example of Great Britain.

Among the other maritime nations, that which stands at the head, France has at present but a small commercial interest in the basin of the great ocean, in that part at least to which the ship canal of Panama facilitates the access. Her navy is powerful, distinguished as much or more by the knowledge and coolness of its officers, by the courage and skill of its sailors, as by the number and good construction of its ships. But with her, the mercantile marine is in a deplorable state of depression; measures of pretended protection have crushed, instead of stimulating and strengthening, it. The French flag holds an humble rank in foreign commerce. Still she has in these quarters some valuable positions. Tahiti will become, when she chooses to make it so, a smart place for furnishing and repairing ships, and a point of conveyance for a multitude of vessels. The Marquesas are not without value; and should she ever learn again the secret which enabled her to found the colonies of St. Domingo and Canada, New Caledonia may be a colony, which will recompense her for a part of the admirable possessions which she lost under Louis XV., and during the wars of the revolution and the empire.

But until this new order of things comes round, her part, in reference to a ship canal,

will rather be that of a curious observer of the fortunes of another, or that of a disinterested arbitress, favoring by the disposition she has of interesting herself in all human affairs, which is, according to the use she makes of it, a virtue or a fault, the construction of a means of intercourse which will be a benefit to the world. The personal sympathy of the French emperor will doubtless be easily gained for this enterprise, for he has in times past, been its most distinguished advocate. No one, more than he, has contributed to fix the thoughts of the intelligent public of two continents upon the best location for the canal; to him, more than to any one else, belongs the merit of having designated Nicaragua as the place for the canal, and pointing out, upon the map, the line it should follow through the two lakes of Nicaragua and Managua terminating at Realgo.

It is true, State policy has its inexorable necessities, before which the power of the greatest monarchs spontaneously stops, and rightly so, for the noblest manifestation of power is to resist personal instincts, and to restrain private feelings when the interests of the State require it. But as regards the canal between the two oceans, nothing of this kind is to be expected. Not only the general wants of mankind but those of each State in particular; not only well understood interests, but the instructive feelings and prejudices of all nations call for the construction of this canal, and the gratitude of all will be given to that nation which shall boldly take the initiative in it. The almost total absence of French commerce in these quarters, the marked insignificance of French establishments on the Pacific, show clearly that France need not make professions of disinterestedness in all that she may do in favor of this canal. The children of New York and Liverpool, of Washington and London, know that the French flag is scarcely seen on the Pacific Ocean; we need not therefore declare this to the statesmen of England and the United States.

Passing rapidly in review all the commercial States, we can see how great is the interest all the world has in the opening of the isthmus by a ship canal; Rotterdam and Hamburg, Liverpool and New York, the industrious Zollverein with its thirty-four millions of industrious laborers, Switzerland whose patience and economy have naturalized manufactures among her rugged mountains, Austria with her remarkable woolen fabrics, as well as the workshops of Manchester and Birmingham, and the manufactories of Massachusetts and Connecticut, and the mills of Liege and Berviers, will all be benefited by it. Russia needs a ship canal to communicate conveniently with her American possessions, now abandoned to a miserable tribe of savages, but worthy of a better fate, and for the more rapid settlement of the Valley of the Amoor, which she has just, by a stroke of the pen, added to her numberless provinces. Spain wants it, as an outlet for the ever-increasing produce of her magnificent island of Cuba, and to shorten the distance between her and the Philippine Islands, which have, up to this time, added nothing to her power and commerce. Thus there is but one wish in the world, that this project for a ship canal, through the Isthmus of Panama, should be brought down from the clouds of speculation to the solid ground of reality.

The initiative to be taken by the French nation does not demand financial sacrifices of any importance. A moral support, a strongly marked patronage is all that can be expected. It may be that owing to the earnestness and asperity that has arisen in the discussions between England and the United States, relative

to Central America, that the presence of a conciliatory and disinterested umpire, such as France may be, will be necessary to the success of the enterprise.

We have as yet hardly mentioned the convention made by M. Belly with the States of Nicaragua and Costa Rica, the only States in Central America having territory bordering on the line of the canal. This may be found in detail in the publications of M. Belly and Thomas de Gamond. It is impossible to deny that it is clear, precise; that all important questions that may arise have been considered in it, and that the interests of the whole world have been cared for in a satisfactory manner. The governments of Nicaragua and Costa Rica, through their Presidents, General Martinés and Don Juan Mora, have displayed an excellent spirit and a patriotism at once noble and intelligent. They have not recoiled before anything tending to accomplish the work.—The privileges granted to the contractors are such as will attract capitalists. The charter is to continue for ninety-nine years from the opening of navigation; a tract of land two-and-a-half miles wide on each side of the line has been granted; the tariff of passage and freight agreed upon is highly remunerative, being a maximum price of ten francs per maritime ton, and sixty francs per passenger. Experience will determine what changes, if any must be made in this tariff. The passenger rates may be collected, that for ship will probably be found too great.

For a vessel of a thousand tons 10,000 francs seems to be a high charge. The harbors forming the outlet of the canal on the two oceans have been already declared free ports, and will ever enjoy all the immunities this title carries with it. All flags without exception, are here placed upon an equality. The contracting States will each of them reserve 4 per cent of the gross receipts of the line, during the term of the charter; and in return they agree to protect the stockholders, their agents, and their property against all attacks, foreign and domestic, under penalty of damages, to be fixed by arbitrators, and deducted from the 8 per cent granted by the company.

In order to complete the agreement with the two contracting States, a preference has been declared in the treaty for the line starting from the mouth of the Sapo on Lake Nicaragua and terminating at Salina Bay on the Pacific Ocean. But as I have already remarked, this preference, which may greatly enhance the difficulties and expense of the construction, is not decisive. The line by Realgo may be adopted, if that by Salina Bay is shown to be too difficult.

Such is the project presented to the capitalists of Europe, or rather of the world. It is for them, as well as for those named in the charter, to examine into this matter, and plans, prepared by men whose reputation entitles them to confidence, should be laid before the public, as has already been done with the Isthmus of Suez. It would be a great honor to our age, and a great service to the future, if these two enterprises, each the complement of the other, should be brought to a speedy termination. The spectacle of such changes, worked by the industry of man on the earth's surface, has a grandeur which captivates the heart, and which cannot be without effect in turning minds from warlike enterprises, which, in spite of the wreaths of glory with which the vulgar imagination surrounds them, are nothing more, in the eye of the Christian and the philosopher, than vagaries of human reason, and fearful abuses of human power.

Man loves the sight of power, and rashness

even has its charms. To lead men to love peace she must be made to appear powerful, majestic, audacious even. We must learn that in her quiet field, force may be displayed in as colossal proportions as in the delirium of battle. In this respect, undertakings like those of the ship canals of Suez and Panama are calculated to exert a moral influence, which should commend them to all civilized nations. —*Hunts Merchants Magazine.*

STEAM ON COMMON ROADS.

A steam carriage made a trial trip on Tuesday last, on a common road, from Trenton to Philadelphia. A correspondent of the N. Y. *Courier and Enquirer* gives the following account of the trip:

As nine was deemed a sufficient number for the engine to carry on this occasion, (though if necessary, it can accommodate fifteen,) a coach was provided for the remaining passengers, who, however, took turns in riding on the machine.

We started at 2:26 P. M., the carriage nearly a mile in advance. The engine had been sufficiently tested in short runs, like that at Trenton, to make sure that it would go well over paved streets or macadamized roads, with easy grades; its endurance and speed on long pulls, and its power of overcoming high grades were yet to be proved. The first half hour on the road not only settled all these questions, but developed a reserved power, far beyond the requirements of any ordinary duty. It had been the intention to keep the carriage ahead, but it was soon apparent that this could not be done. The engine in a very few minutes overtook it, held up to it, got another start, came up again, and finally passed it and arrived at Neshaminy Bridge, a half mile or more ahead, having made the distance, three miles, in sixteen minutes, running time.

The road was smooth, with a hard bed and light grades, covered all the way, however, with more or less of loose material, with occasional stretches of pretty deep sand. On examination, the engine was found to be all right in every part, and so far all was well.—Before us, however, was a long covered bridge with a draw in the middle, in regard to which we had been cautioned at Bristol, and, as an inspection showed, with very good reason. Though heavily enough timbered ordinarily, it was old and shaky, and the loads which ordinarily cross it not large enough to furnish decisive proof of its sufficiently to bear the weight the engine would bring upon it. It was obvious that it must be crossed at high speed, if at all, and certainly there was no disposition to flinch from the attempt. Beyond, the road climbs a long hill, with a particularly sharp pitch about one-third of the way up, with an inclination of at least one foot in ten, perhaps one in eight, and very much more severe than any the engine had had experience of. It must be done, however, for the engine was on trial, and its judges, the Philadelphia Committee, were present; and it must be done, too, the first time trying. A furious fire sent the steam up to 180 pounds, the spectators took up their posts of observation, and the men their posts of duty.

Our chief, standing erect, with head bared, on the deck forward, gave the word, steam was let on, and the engine started. There was a moment of suspense as it entered the bridge, and fairly jumping, as it seemed, with the vibration of the long arches, approached the treacherous draw, but it was of short duration;

sooner than the story can be told or read, it had cleared the draw, crossed the remaining length of the bridge, and emerged from the covered passage like some infernal monster from the mouth of the pit, with energies wrought up to the highest pitch for the final struggle. With every valve wide open, and all steam on, it whirled along the slope, apparently at the highest locomotive speed, and approaching the steep pitch, surmounted it with unflinching tread, hurried far along the level summit, and stopped, in exactly one minute from the time of starting, having traversed, in that short interval, a distance of fully one thousand feet.

The next mile was made in five minutes; the next following, which included the ascent of another long hill, in six. Without going into further particulars as to the remaining portions of the way, it may suffice to say that it was found to be perfectly easy to maintain, on fair grades, a motion at the rate of twelve miles per hour; that when there was any occasion for it; this rate could be increased one-fourth or one-half; that the steepest and longest hills could be ascended at the rate of ten miles per hour. As no previous arrangement had been made for supplies of fuel and water, much time was consumed in stopping to procure them, more even than there was in running; the whole time occupied on the trip being five hours, thirty-four minutes, while the actual running time was but a minute or two over two hours. The last four miles of the way, lying through the streets of the city, was necessarily made at less speed, but even including this, it will be seen the actual running time gave an average rate of ten miles per hour.

ON A NEW SYSTEM OF AXLE BOXES, NOT REQUIRING LUBRICATING, AND WITHOUT LIABILITY TO HEATING. BY ALPHONSE DE BRUSSAUT.—The author first recapitulated the liability to accident, arising from inattention to the constant greasing of the ordinary axle boxes and journals of carriages and of machinery, the inconvenience of accumulating dust and grit on the bearings, and the friction and wear and tear arising from these causes. He then reviewed the numerous inventions and attempts to remedy these evils, showing that none of them had hitherto successfully abolished the necessity for the expensive and uncleanly use of some lubricating matter. He next proceeded to describe the system which he had introduced, and had applied somewhat extensively in France, to various classes of machinery, in which the use of grease had hitherto been considered indispensable. The new apparatus was described to consist of a series of four, six, eight, or any other convenient number of cylindrical rollers of the length of the journal, retained at certain distances apart from each other, yet still united by elastic bands of vulcanized india rubber. These rollers, thus united, and placed around the journal, would be set in motion by the pressure of the axle, without the possibility of collision with, or friction against each other, or of rubbing upon the surface of the journal or of the bearing, and thus avoiding, as much as possible, any friction or opposition to the motion of the journal. The action of rolling being thus substituted for sliding, there could not be any abrasion of the substances, and lubricating became unnecessary. The machines so fitted were stated to work with remarkable ease and steadiness, and to be set in motion, and the speed to be kept up, with considerable facility. No inconvenience had been experienced from the fracture of the elastic bands and shafts,

making 450 to 500 revolutions per minute, working perfectly well, without any symptom of heating.

The reasons for this action were stated in a plain and comprehensive manner, by showing that in moving a body of an octagonal form along a plane, the action must be either by sliding or by rolling; in the former, lubrication was necessary, whereas, in the latter, the presence of any lubricating matter would be prejudicial. Extending the latter principle to the cylindrical form, which was merely a body having an indefinite number of sides, it was evident that by retaining these cylinders apart by means of the elastic bands, so as to avoid friction against each other, or upon the journal or the bearing surface, a practically perfect rolling motion would be obtained, and it was contended that by M. Brussaut's system, the two material results of rapid rotation without heating, and a complete suppression of the use of grease in all journals of machinery were arrived at.—*Lond. Civ. Eng. and Arch. Jour. May, 1859.*

RAILROAD AND CURRENCY MEETING IN ST. ANTHONY.

The citizens of St. Anthony assembled at Stanchfield's Hall, Saturday evening June 25th, and the meeting was called to order by H. H. Hemiup, whereupon C. A. Tuttle was chosen Chairman, and L. P. Foster, Secretary. Judge B. B. Meeker then addressed the meeting, on the following topics, viz:

1st. The acts of our first Legislature in regulating the salaries of our State officers.

2d. The Railroad System and Five Million Loan.

3d. The currency based upon the bonds issued by said railroad companies.

The remarks closed by the Judge offering the following preamble and resolutions, viz:

Whereas, It has been proposed to build a system of railroads in the State of Minnesota, by lands granted by Congress, in fact, charged to the people, and by the credit of the State in further aid of the several companies, and

Whereas, The currency based upon the bonds issued to said companies has fallen worthless upon our hands.

Resolved, That the people, in their primary assemblages and elsewhere, owe it to themselves to take some steps to relieve the State from the threatened bankruptcy and themselves from the loss and disaster of a depreciated currency.

Resolved, That the amendment to our Constitution authorizing a loan of five millions of dollars to certain railroad companies was inconsiderate and unwise, and calls aloud for some correction under the influence of the sober second thought.

Resolved, That it is our conviction that no more State bonds should be issued to these companies, under any pretence whatever, and that it will be an imperative duty with our next Legislature to provide for the payment of the interest that may accrue on the two millions already issued.

Resolved, That we abhor and loathe repudiation, and that we will, each and every one of us, use our means and influence to save the credit, and preserve the honor of Minnesota from so foul a blot, yet, at the same time, we would assure said railroad companies and all in authority, that the best guaranty against such an extreme measure of relief is that no bonds be issued by the State in aid of these roads.

Resolved, That in our opinion the policy above indicated, of issuing no more State

bonds, and of providing for the prompt payment of interest on those issued, is the only method by which the latter can be made to command anything like a par value in the great money circle, and the bank notes in the hands of our people, based upon them, to appreciate to their nominal value.—*Minneapolis State Atlas, July 2.*

EXTRAORDINARY CHEAP RUN OF AN ENGINE.—On the North Missouri Railroad, on the 14th inst., the *Boone*, a passenger engine, manufactured by Messrs. Palm & Robertson, of St. Louis, was run from Hudson, the junction with the Hannibal and St. Joseph Road, to St. Charles, says the *St. Louis Republican*—a distance of one hundred and forty-eight and three-fourths miles—in seven hours and twenty-five minutes; making twenty-two stops, and carrying two passenger and one baggage-car, with only one cord of wood. Mr. Guittar, of Columbia, Boone County, and Mr. Geo. Blackburn, were witnesses to the exact measurement of the wood, and can testify that Mr. G. B. Haviland, the engineer, and James Clark, the fireman, on the *Boone*, used not a particle of wood in the above run except the one cord measured to them at Hudson. The cost of this wood was about \$2.60.—*Enquirer.*

SUICIDES IN ENGLAND & FRANCE.

The history of suicides and their motives, as far as ascertained, would be at once curious, interesting, and touching. In some cases the motive is want; in others, disappointed ambition; in others, unrequited love; in others avarice; in others, again, religious enthusiasm; and in many, a wild fanaticism. In the case of Senator Rusk, it is said that it was melancholy produced by the loss of his wife. Doubtless, insanity exists at the moment, in a great majority of cases; and if the wretched beings could only pass by the hours of delirium, they would look upon self-destruction with feelings of horror. It is stated as a singular fact, that the French believe the English more addicted to suicides than themselves, and they give as a reason, that fogs, rain, miasma, and swamps, are calculated, naturally enough, to produce a profound disgust for life, and to demonstrate in their neighbors a disposition to shuffle off this mortal coil. But a work on suicide, recently published by M. Lisle, would seem to settle the question against the opinion we have quoted. The author contends that suicide is not always a sign of mental alienation. He argues, that like every other human movement, it obeys fixed laws, and that hence, year by year, it can be confidently predicted, how many out of a certain population will commit suicide. He states that in France, from 1836 to 1852, inclusive, there were 52,126 suicides; or a mean of 3,066 a year. Before 1836, the proportion was 1 suicide to every 17,693 inhabitants. In 1836, it was 1 for 14,207; and in 1852, it had risen to 1 for 9,340. In 1838 and 1839, England had 1 suicide for every 15,900 inhabitants; France, 1 for every 12,489. Between London and Paris, for the same years, the difference is yet more remarkable, the figures being, for London, 1 in 8,250; and for Paris, 1 in 2,221. The north of France is the most prolific in suicides; nearly the half of the whole number belongs to the north, which has increased its own ratio by one-third. The north has 1 in 6,483; the east 1 in 13,855; the south 1 in 20,457. The department of the Seine, which includes Paris, has risen with frightful rapidity; but Paris and Marseilles, and all large centres, are the foci of suicides

to a very striking extent. Russia stands the lowest of European States in the scale—her suicides being only 1 in 49,182; while Prussia has 1 in 14,404; Austria 1 in 20,900; New York 1 in 7,797; Boston 1 in 12,500; Baltimore 1 in 13,650; and Philadelphia 1 in 11,873. It is stated that, climate has little to do with the matter. In latitudes from 42 to 54 degrees, the proportion is 1 in 38,832; from 54 to 64 degrees, 1 in 56,577. Yet the last figures include Moscow and St. Petersburg, and represent a much more vigorous, damp, uncertain, and joyless climate than the first. Certainly, the low condition of civilization between these latitudes influences the statistics to the full as much as any other assigned or assignable cause; but that the mere temperature and climate have little to do with the question, is proved by the average number of suicides occurring in the different months of the year in France; which are highest in the sunniest, brightest, and most enjoyable seasons.—*Penn. Enquirer.*

EASTERN RAILROAD MEETING.—The annual meeting of the Eastern Railroad Company was held Monday forenoon, in Chapman Hall, Geo. M. Browne, Esq., the President, in the chair.

In answer to an inquiry as to the feasibility of selling the real estate of the company not needed for its business at East Boston, the President replied that it was not practicable to sell the property alluded to at the present time, and he believed the business of East Boston would increase so as to secure a rise in the value of the company's property there.

The meeting then proceeded to the election of Directors. Mr. John Howe declined a re-election.

A discussion arose upon the subject of free passes; and on motion of Mr. Low (amended) it was voted to stop issuing free passes to the Directors of other roads and their families, excepting the Presidents, in all cases where they can legally do so; and also to cut off free tickets to the immediate families of the Directors of the Eastern Road.

A vote of thanks was passed to Mr. John Howe, for his services as President and Director, by a unanimous aye. Mr. Howe expressed his gratitude, and glanced briefly at the history of the road during the past four years, showing what progress had been made in reducing the liabilities of the road during that time.

The result of the vote for directors was as follows:

Whole number of votes.....	6990
Necessary for a choice.....	3490
George M. Browne of Dorchester had.....	6975
Samuel Hooper of Boston.....	6990
Micajah Lunt of Newburyport.....	6931
Franklin Haven of Boston.....	6944
Nathan B. Chase of Lynn.....	6990
Henry H. Ladd of Portsmouth.....	6796
John C. Lee of Salem.....	6927

and they were elected. B. L. Allen had 36 votes, John Smith of Portsmouth 16, and S. A. Chase of Salem 49.

The meeting then dissolved.—*Boston Mess.*

THE GRAND TRUNK RAILWAY.—The Toronto *Leader* says, that the works on the two extreme sections of this road are advancing with great rapidity. The western section, including the extension from Port Sarnia to Detroit, as well as the section below St. Thomas, will be in such a forward position as to be opened for traffic by the 1st of September. The floating bridge across the river at Sarnia will also be completed by that date. Thus, with the exception of the Victoria bridge, the whole road will be thoroughly completed in less than two months; and as elsewhere stated, the Victoria bridge will be in a condition to be opened for traffic by the 1st of November.

LITTLE ROCK AND FORT SMITH BRANCH OF THE CAIRO AND FULTON RAILROAD.—A meeting of the Directors of this Railroad Company was held at their office in this city on the 8th ult., at which time, measures were taken to put the first division of the road in course of construction. The Company have secured the services of Mr. J. H. Haney, as Engineer, who, with his corps of assistants, will soon be in the field, engaged in surveying and locating the first division of the road, which commences at Van Buren, and runs east to Mulberry Creek, a distance of twenty miles. The Company have decided to offer one-half of the lands belonging to them, on the first division of twenty miles, at public sale sometime next fall.

We think this enterprise has now a favorable commencement, and hope to see it pushed on to a speedy completion, for it is a matter of more vital importance to the interests of Western Arkansas, than any other that ever has, or can be presented to our citizens. Let every one, then, give the enterprise all the aid in their power.

At the meeting of the Directors, Judge Rose resigned the office of President of the Company, and Hon. Jesse Turner of this city was unanimously elected in his place.

THE WELLAND RAILROAD.—We have the satisfaction of announcing that the capacity, and facilities for the transportation of grain by the Welland Railway, have been successfully developed in such a manner as fully to carry out the opinions expressed by its promoters in their original prospectus.

Although on account of inadequate notice, sufficient preparation had not been made for the experiment, and the machinery was not put in motion until near 1 o'clock, the cargo of the schooner *Farnham*, 12,750 bushels, was by 7 o'clock transferred to a train of 27 cars at Port Colborne, which, before 8 o'clock, was in motion down the line.

The weight of this train, something over 350 tons, was easily drawn by one locomotive; and in the opinion of the Superintendent, the capacity of a first-class engine would equal 14,000 bushels of corn, or 382 tons a load. This fact shows the advantage possessed by the Welland Railway for carrying heavy trains at a small expense; and that, when the machinery is in good working order, a cargo can be transferred from the hold of a vessel on Lake Erie to the hold of a vessel on Lake Ontario within twelve hours.

The facilities of this line will, we feel assured greatly increase the amount of trade in the direction of Lake Ontario, and regain what has been lost by the Canada route through the competition of the New York railways.—*St. Catharine's Journal*.

RUNNING EXPENSES ON RAILROADS.—An invention applicable to steam engines, and called the "variable exhaust," is used upon some of the locomotives of the New York Central Railroad. One of them is applied to the locomotive "Willink," on the Western division. The result of this application, as we learn from the *Rochester Democrat*, is as follows:

From the statement of running expenses of locomotive engines on the Western division for the month of May, we find the "Willink" was run 3,696 miles, using 36½ cords of wood, or 1 cord to 101.26-100 miles—the most economical machine on the Western division.

Compared with the "W. W. Corcoran," a machine precisely similar to the "Willink"—built by the same makers, of the same size and power, and engaged in the same business on the same road—the saving of fuel and oil is surprising. The "Willink" ran 101.26-100 miles for each cord of wood consumed, and the "Corcoran" ran only 49.20-100 miles. The "Willink" used one pint of oil in running 80.35-100 miles, while the "Corcoran" used one pint in running 45.88-100. In April the "Willink" used only one pint of oil in running 117 miles.

RAILROADS IN BRITISH INDIA.—A "Report on the Construction of Railways in India" has been laid before Parliament by a committee appointed to examine into the subject.—From this document we learn that there are seven separate companies engaged in constructing lines in India, under the guarantee of the Indian government. These are as follows:

1. The East India Company, whose line extends from Calcutta via Rajmahal and Allahabad to Delhi, or Meerut, with a branch from Mirzapoor, to meet the line of the Peninsula Company at Jubbulpore. The length of this line will be 1,400 miles, and it is already completed to Patna. The cost has hitherto been about £12,000 per mile.

3. The Great Indian Peninsula Company's road from Bombay in a north-easterly direction to Jubbulpore, where it will form a junction with the East India Line, and in a south-easterly direction via Poonah and Sholapoor, to meet the Madras line at Bellary. It is already completed to Poonah.

3. The Madras Company, whose line from Madras via Cuddapah and Bellary (junction of the Great Indian Peninsula) will extend in a western direction to the Malabar coast at, or near Beypoor.

4. The Bombay, Baroda and Central India Company, the line belonging to which extends from Bombay via Surat, to Baroda and Ahmedabad, and which, for several miles out from Bombay, uses a common line with the Peninsula Company.

5. The Scinde and Punjab Company, which is constructing a line from Kurrachee to Kotree on the Indus, and from Mooltan to Lahore, with a connection between Kotree and Mooltan by steam navigation.

6. The Eastern Bengal Company, with a line from Calcutta to Dacca, and a branch to Jessore.

7. The Great Southern Company, with a line from Salem via Trichinopoly to Nengapatam, and southward to Madura, and Tinnivelly.

In all British India there are now 12,000 miles of line projected, and it is estimated that the construction of the whole will average £6,000 per mile, or £72,000,000; but the probability is, that it will cost, at least, 50 per cent. more.

The cost, as estimated for each of the several lines above enumerated, is stated at the following sums:

East India.....	£12,731,600
Great Indian Peninsula.....	11,000,000
Madras.....	6,000,000
Bombay, Baroda and Central India.....	2,000,000
Scinde and Punjab.....	2,500,000
Eastern Bengal.....	1,000,000
Great Southern.....	2,000,000

TIRES FOR RAILROAD WHEELS WITHOUT ANY VISIBLE JOINTS.—Quite a number of tires are manufactured in France and Belgium according to a process patented by Petin, Gaudet, Jackson & Co., in Rive-de-Gier, Southern France. This process consists of a series of operations succeeding each other at short intervals, whereby the tire is produced perfectly ready for use. A bar of iron or steel is first rolled out to the required thickness; it is then passed into what they call an *enrouleur*, or coiler, which forms the bar into a coil, resembling a coiled spring, or a corkscrew having its threads compressed. This coil is welded under a very heavy hammer, which at the same time forms it from the rough. The piece is now passed into the first rolling mill, whereby its shape is improved, and a second rolling-mill completes the operation by perfecting the shape, and smoothing the surface of the tire. All this is done with so much accuracy and rapidity that, in the factory at Rive-de-Gier, from one hundred pieces, hardly one is spoiled, although sixty thou-

sand kilogrammes (1,320 cwt.) of iron and steel are formed daily into tires. These require no turning, and have no visible welding joint, the tire being manufactured from a ring, the diameter of which is increased as it passes through the rolling-mills, whereby the required form is given to it at the same time.

Until lately only one such factory has been in existence in Europe, but at present one of the largest iron manufacturing in Belgium, the company of Ougrie, at Seraign, near Liege, have introduced this process in their works, and large numbers of such tires are now manufactured and used all over Europe.—*Scientific American*.

THE VICTORIA BRIDGE.—We are glad to be able to announce that the Victoria bridge is so far advanced that it may be safely counted upon as being certain to be open for traffic by the 1st of November next. Fears were at one time expressed, we observe, that the progress of the works might be impeded by the high water in the St. Lawrence; and that the opening of the bridge would be delayed till next year. The recent progress of the work, however, has been such as to banish all fears of this kind; and humanly speaking, it may be regarded as certain that the bridge will be in a position to be opened by the 1st of November next.—*Montreal Com. Adv.*

EATON AND RICHMOND.—We are informed that the total amount which, by the terms of the recent settlement between the different parties in interest, the Company has agreed to pay, will not exceed fifty thousand dollars, and that this sum can probably be paid within a year from the 1st inst, out of the net earnings of the road.

The gross earnings for June were nine thousand dollars. Substantial improvements have been made on the line between Hamilton and Richmond, during the last year, and the bridge structures and road bed will be renewed at various points this season. The Corners Branch culvert 3 miles this side of Richmond, 80 feet long, with a 20 feet span, is now completed, and is a substantial piece of masonry. All the wooden structures between Eaton and Richmond will be replaced with substantial stone work. The bridge at Somerville is to be rebuilt, and ten thousand new cross-ties will be put in as early as practicable. Two hundred tons of new iron will be laid in the track before the close of September. The road remains under the present management, that of President Barnett, and Superintendent Morrow.—*Commercial*.

OFFICIAL ABSTRACT.—The following abstract of the census of Harrison Co., Iowa, for 1859, we compile expressly for the benefit of our readers.

Pop.—males 1,690; females 1,442; total 3,132; increase since 1856, 1,227; voters 704; militia 535, foreigners not naturalized 35; between the age of 5 and 21 years 1,060; blind 3; deaf, dumb, insane, and idiotic, none. Acres of improved land 14,738; unimproved 66,895; acres of Hungarian grass 62; tons of grass 237; acres of meadow 18; tons of hay 5,077; bushels of grass seed 81; acres of spring wheat 2,776; bushels harvested 9,207; acres of winter 11; bushels harvested 27; acres of oats 1,000; bushels harvested 15,440; acres of corn 5,998, bushels harvested 210, 255; acres of potatoes 435, bushels harvested 18,999; number of hogs sold 4,153, value \$28,735; number of cattle sold 815, value \$36,173; pounds of butter manufactured 52,225; pounds of cheese manufactured 3,077; pounds of wool manufactured 728; value of domestic manufactures \$4,633; value of general manufactures \$652, value of agricultural implements \$7,563.

THE Earnings of the Sandusky, Mansfield and Newark Railroad Company, for the month of

June, 1859, were.....	\$16,440 17
June, 1858.....	17,126 13

Decrease..... \$685 96

The Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

Thursday Morning, July 28. 1859.

THE RAILROAD RECORD,
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The European Agents for the *Railroad Record* are MESSRS. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

SOUTHERN PACIFIC R. R.

Dr. Fowlkes, its President, passed through this city to day, en route for Texas, to liquidate the debts of the Company. The State suit having been, as we learn, unconditionally dismissed. The means are provided to pay off the entire debt, under the compromise.

Dr. Fowlkes desires to retire from the presidency, and he expects to elect J. Edgar Thompson President of the Road before he leaves Texas, also to connect Sam'l. Taté, President of the Memphis and Charleston Road with it.

Hon. James C. Jones of Tennessee, goes actively to work for this great National enterprise, and already the general basis of union has been agreed upon between this Road and the Memphis & El Paso Company, in Texas, adding much to the value of the stock of the Company, and its further prospects.

Mr. Thompson is well known as one of the ablest Railroad men in our country, and if he enters upon his duties in S. P. R. R., with his usual energy, no doubt can be entertained of the speedy completion of the enterprise. The Company is now on a firm basis, with money enough in its treasury to build the next 25 miles.

THE PERVERSION OF STATISTICS.

RAILROAD AND AGRICULTURAL.

Statistics are a doubled edged sword, and may be very much perverted especially when they are used at random, without any proper understanding of their bearings. Every now and then, we meet with a case of this sort. Casually opening the "Merchant's Magazine," a most valuable work, we found the following paragraph in the midst of an article on Mr. Carey's Views of the Tariff:

"We will pass over Mr. Sulley's objections to Mr. Carey's views respecting the grinding effects of the tax of transportation, with the mere remark, that if he would look to the fact, that our railroad system has cost more than \$1,000,000,000—has brought ruin upon nearly every one connected with it, the nation included—that its demands upon the people amount to more than \$150,000,000 per annum, equal to the entire value of our agricultural exports, (cotton and tobacco excluded,) for the two years from July 1st, 1855, to June 30th, 1857; he will find that no nation of the same population, claiming to be civilized, is at the present day called upon to give as large a proportion of its entire production to mere transporters. What power would not the one-half portion of the amount expended in railways give to us if directed to the development of our mining, manufacturing, and mechanical resources, in addition to that already expended, and which need not have been invested in railroads, had the policy of the government favored concentration of population?"

Here are a series of assertions based on the tolerably correct statement, that our Railroads have cost \$1,000,000,000 (too high,) and receive \$150,000,000 per annum. The conclusion drawn from these facts are, every one of them, erroneous, and are a monstrous perversion of the true state of the case:

1. It has brought ruin upon those "connected with it, the nation included." Perhaps nothing more false than this was ever asserted. It is proved by the sales and appraisements of property in the States, and at the period when railroads were made, that the entire amount of property rose immensely in value. It is also proven by the same sales and appraisements, that property nowhere rose so high, and so rapidly, as that on the immediate line of the Railroads. The effect of Railroads on the value of property, neither is, or ever was doubted by any intelligent person. Such being the fact, how can the "nation" be injured by it? The nation is benefitted by whatever benefits any of its parts. A very large part of all the lands in the United States were benefitted, not merely in the selling price, but in being made accessible to market, and therefore available for cultivation. But this writer seems to think that the "nation," in some way loses this one hundred and fifty millions paid to railroads. How? It is paid by one class of citizens to another, and how does the nation

lose by it? This is obviously nominal. Some body among those who pay, and those who receive, may make a loss, but how does that affect the nation? The nation has all the money, and all the industry, and all the crops it had before.

If this superficial writer will inquire (if indeed, it be a fact,) why we pay more than other nations for transportation, he will find that it flows from the superior resources of our country. We have a larger country, and a large part of our fertile fields are very remote from the large markets. Hence we must have long lines of transportation, and hence more must be paid for transportation.

But have the Railroads brought "ruin" upon those connected with them? This is so far from being true that where there is one road which has ruined its stockholders, there are three that make fair profits. In the same Magazine, (page 120 of July number,) will be found a summary of Captain Galton's review of the Railroads of Great Britain and America. It will there be found that the average *nett earnings* of American Railroads is 6.17 per cent. This is nearly double the rate of interest in England, and about equal to the interest in New England. Who in his senses, will call that ruining the proprietors? This is the rate on 26,000 miles of Railroad, and not on the half-dozen stock-jobbing concerns which are floating about the broker's tables of New York and Philadelphia. Some Railroads have utterly failed, and so have some in every branch of business.

The most foolish part of the above paragraph is the last. Of what use could it be to develop mining and manufacturing without any means of getting the products to market. In the great Central West are the greatest rewards for both agriculture mining and manufacturing. Some of the fields and mines are touched by navigable waters, but most of them are not; and it is not till a system of transportation in all ways was fully established, that Mining and Manufacturing could be successfully carried on. This writer seems to think the country pays too high for transportation. Does he not know that we pay much less, proportionably, than we did ten years ago? Does he not know that canals reduced the price of transportation much below what it was before, and that now Railroads have compelled Canals to reduce their freights? Let every Railroad be thrown out of existence, and we should have double as much to pay for transportation. The truth is, every improvement in modes of transportation has reduced the price of freights. Another idea of this writer is, that New England has, by vicinity to great markets, been able to increase the productiveness of its agriculture. In a certain sense, this is true. In the neighborhood of a city land is reduced to garden cultivation; but this extends over a small district of country. A New England farm is no test of any thing in the agricultural line. Examples taken from

its Statistics of Agriculture, are very useless. This writer says that agriculture should be estimated *by the rate per acre*, and gives the following example:

"This statement can be extended with advantage to other of the New England States; it appearing while of Indian corn, South Carolina raises to the acre eleven bushels, Alabama fifteen, Georgia and Louisiana sixteen, North Carolina seventeen, Mississippi and Virginia eighteen, that in Maine the average is thirty-two, in Vermont thirty-three, and that of all the States *Connecticut is the highest*—yielding forty bushels."

There is something rather ludicrous in this statement; as if the culture of Indian corn in New England and the Ohio valley *could* be really compared. The rate per acre is a true test, if we take another, thing into view—*equal space of land*—there are several counties in the State of Ohio, which produce *more corn than the whole State of Connecticut*. In Connecticut the corn is produced wholly on the bottom lands of the rivers, while in Ohio a great deal of corn is produced on the uplands, where the rate per acre is of course much less. To make the statistical comparison fair, we will compare as near as possible, *equal spaces*, of nearly equal land, thus.

Connecticut, 48,376 acres.....	Bush.
Butler County, Ohio 62,031 acres.....	1,932,943
Average of Connecticut.....	2,696,183
Average of Butler County.....	40
	42.6

Butler County has 33 per cent more land in in corn than Connecticut, and produces *two* bushel more. We state this merely to show how inconsistently statistics may be read, when they are not properly offered. Connecticut agriculture, we are very familiar with, and there is nothing there or any part of New England to be compared with the West in agriculture. They are not *alike* in any particular.

The writer of the above paragraphs is entirely right in giving high value to *rotation*, and to the importance of markets to produce rotation; but he should not use statistics so loosely. Take a precisely parallel case, in all respects, and you may make comparisons, by statistics, which will be useful and valuable.

THE MONEY OF THE PEOPLE, BANK NOTES AND DEPOSITS.

We hardly know a more suggestive and instructive statistical table, than the one below, prepared in New York. In advance, we may say, that *deposits* are very properly classed with currency, because *checks* on these deposits are just as much cash as bank notes, or coin. A, for example, has ten dollars in his pocket, and a thousand in Bank; and if he wants to pay a bill at a store, one is as available as the other. Hence, the money at command, on any one day, consists of deposits, as well as bank notes and coin. The table is as follows:

"The following summary has been prepared by a committee of the Board of Currency. It shows, in the first place, the pro-

gressive accumulation of bank cash liabilities, under the heads of 'circulation and deposits,' for each year, from 1834 to 1858; secondly, the population of the same dates; and finally, the ratio of combined circulation and deposits to each individual:

Years.	Circulation and deposits.	Population.	Per head.
1834.....	\$170,566,556	14,413,204	\$11.83
1835.....	186,773,260	14,814,617	12.61
1836.....	255,403,478	15,230,948	16.77
1837.....	276,383,075	15,663,597	17.66
1838.....	300,830,094	16,113,664	18.46
1839.....	325,411,141	16,581,849	19.59
1840.....	382,665,429	17,069,453	22.40
1841.....	472,180,375	17,577,073	26.85
1842.....	546,142,881	18,105,785	30.16
1843.....	614,732,236	18,656,796	32.95
1844.....	689,718,431	19,229,558	35.86
1845.....	777,679,357	19,825,721	39.23
1846.....	869,465,497	20,446,137	42.52
1847.....	973,312,229	21,991,909	44.24
1848.....	1,082,732,268	22,764,076	47.56
1849.....	1,205,922,638	23,463,723	51.39
1850.....	1,349,953,121	24,191,876	55.80
1851.....	1,512,923,963	25,055,017	60.39
1852.....	1,696,906,080	26,033,158	65.18
1853.....	1,898,094,831	26,464,299	71.70
1854.....	2,127,877,921	26,949,440	79.00
1855.....	2,387,352,565	27,047,581	88.26
1856.....	2,684,453,612	27,858,722	96.73
1857.....	3,013,130,174	28,682,863	105.05
1858.....	3,411,140,303	29,529,004	115.51
1859.....	4,522,875,096	30,370,145	148.90
1860.....	.....	31,233,289	.....

Some important deductions may be made from this.

1. The era of greatest activity in business, and of speculation of all kinds, was undoubtedly in 1836-'7; and, accordingly, we find, at this period, *the largest amount of money per head*, viz: \$17.00 per head.

2. The period of utmost stagnation undoubtedly was in 1843 and the table represents that fact, in the extreme reduction of the currency to 6.15 per head.

3. We find in 1848-'9, and in 1854-'5, some reduction, but generally a uniform rise in the amount of currency till 1857, when it reached 15 per head.

4. Corresponding precisely with the revolution of 1857, we find the currency falling suddenly from 15 to 11; the lowest point reached since 1850.

5. The great point indicated by this is not, as commonly supposed, Bank inflation and contraction; but a much more direct and simple principle, viz,—that in a time of commercial revulsions, *credit* of all kinds being diminished, *the people are compelled to use more of their own money*, and less of credit.—A, being unable to get money in the usual way, checks out his balances. Thus deposits are diminished. B, unable to get a Bill of Exchange on credit, returns Bank Notes to the Bank for coin; and thus, the Bank Notes are diminished. Thus, the entire volume of currency is diminished; and finally, banks, public and private, merchants and individuals, *are all obliged to contract*. Banks do not contract voluntarily; they are obliged to do it. Merchants do not contract voluntarily.—The simple truth lies in a nut-shell. Credit is an instrument of trade. It is elastic. It is the instinct of merchants to extend it. But, there must come a time when credit can not be extended; and at that point it begins to react.—The reaction at one point affects all

others; and goes on to a crisis. But action and re-action are equal. The re-action ceases and credit begins again to expand. Then the process goes on, and it is beyond the wisdom of man to prevent it while credit exists. Credit will continue, because it is the very base of modern commercial transactions, and because civilization has introduced such a vast machinery, that it can not be kept in motion without credit. There is not a tenth part of money enough to carry on commercial transactions. The debts (of all kinds) in the State of Ohio, are about \$220,000,000; and those of the United States, about \$2,500,000,000, of which \$500,000,000 become due in ninety days.—How can the money of the country carry on these transactions in cash? We need not trouble ourselves about *credit*. It will last while men lasts, and, at intervals of eight or ten years, will regularly bring a commercial crisis.

For the Railroad Record.

OBSERVATIONS ON THE DANGERS AND DEFENSES OF THE MARITIME CITIES OF THE U. S.

This is a subject which has justly attracted great attention within a few years past. The vast military movements of Europe, in the last six years—the tremendous armaments and multitudes of men engaged now in deadly strife in Italy, the novelties of invention and the superiority of new weapons used in the present war, naturally call the attention of patriotic men to questions connected with the defense of this great country. It is in our principal maritime cities—centers of an increasing commerce which the interior resources of the country augment with an unparalleled rapidity—that we are vulnerable. The taxable property of New York city is this year \$551,923,122, of this real estate constitutes \$378,951,930, and the personal \$158,336,730; non-resident \$14,631,462. The taxable property of the suburban cities and towns, Brooklyn, Jersey City, Williamsburg, Hoboken, Yorkville, Harlem, &c., may be reckoned at one third of the New York property, or \$183,974,374, total \$735,897,496. It may be reasonably assumed that this amount will increase geometrically, in a double ratio, for the next forty years, in each twenty years. Consequently in 1879 it will be double its present amount, or \$1471,794,992, and in 1899 quadruple its present amount, or \$2943,889,984. It will continue to increase after that, but at a slower rate, as in densely populous communities property can no longer obtain so high a rate of increase.

But this capital is of such a nature that it uses ramify throughout the whole nation. It probably affects the rate of increase, stability and prosperity of not less than an equal amount of property throughout the United States. To defend this property, therefore, is to defend an equal amount in other parts

of the Union intimately connected with it, and whose values are largely dependent upon its security.

The safety of this New York and suburban New York property requires fortifications. The amount of property that these fortifications should defend is so immense, that it will certainly justify the the largest expenditure which I have yet seen estimated as necessary to effect its protection. This maximum is about twelve million, and this to be distributed over five or six years. This maximum estimate would be a tax of but 82-100 per cent. or the 122d part of the value of the property to be secured. What judicious man worth a million or more, or even much less, would not be willing to pay a premium of 82-100 per cent. to insure himself a six per cent. income, the security offered being supposed ample? In England the monied men pay almost par for the consols, which are three per cent. In the U. S. our six per cent. national stocks, having 16 to 20 years to run were a few years since at 16 premium and are still high proportionately to time.

Very interesting discussions have recently been published in pamphlets, of which Lieut. St. C. Morton, and Major J. G. Barnard are the authors. They relate to our system of fortifications.

In the observations which I propose to submit to the public, I shall maintain the importance of constructing cannon for our largest fortifications of larger calibre than those in present use—not excluding, however, a part of those now used—the importance of using a portion of *rifled* cannon in our fortresses and the importance of the use of rifles of long range. Sharpe's, or some others should be adopted—as may be determined by men of competent military knowledge, after sufficient experiments.

I consider our present system of fortifications sufficient, in general, as to the extent of ground occupied, and the general structure; but that to meet the new improvements in naval armaments, it is important in our largest fortifications to have a number of cannon of large calibre, and at the same time the *rifled* cannon, recently introduced into the French service, or our own of similar character. My reasons for these views will appear in the course of these essays.

I have read with studious attention Lieut. Morton's and Major Barnard's pamphlets.

These gentlemen differ widely. Lieut. Morton is in favor of a great extension of works, and appears to think case-mated works in general, less efficient than barbeite batteries. He supposes that the former is somewhat of antiquated system, and that the introduction of the latter, generally, would prove a great improvement. Upon as exact a scrutiny as I have been able to give, I have come to the conclusion, that the existing system should in general be retained. The exceptions which I would admit are only in such cases where

the line of approach to the beleagued city is long, and the grounds afford ample space. In such a case, one or two of the fronts of particular fortifications, might with propriety be 450 yards instead of 380. This, with other parts built proportionately, as would be proper, would be an enlargement with respect to these particular fortifications, of considerably more than one third in space. I would propose somewhat more than a proportionate augmentation of the number of cannon. But I defer remarks on this subject until I come to treat particularly of the proper calibre of cannon for fortifications.

At Sandy Hook, New York, the extent of ground is adequate for even a greater enlargement of front than I suppose expedient. This point is an important one in the approaches to New York, and where it exists it may be regarded as one of the most important works, though it may be supported as indicated by Major Barnard—with the *enlargement* suggested at Sandy Hook, Major Barnard's plan of the fortifications of New York appears to me perfect. But the *essential* works on which he insists are the only works which at present need to be discussed, as Congress will surely interpose a refusal to appropriate ten or twelve million to new fortifications, however strongly any Secretary of War might recommend such an appropriation. With the increased extent of works at Sandy Hook, the entire expense at New York need not be more than \$6,600,000, which distributed over three or four years, would give for one third of the whole \$2,200,000 per annum, or for one fourth \$1,650,000 per annum. This, though not equal to the real demands for fortifications at New York, might be sufficient with works that could be begun upon a moderate scale, when these are finished and with such works as could be *improvised* in case of emergency.

I am further of opinion that Major Barnard in his controversy with Lieut. Morton, has fully shown, that our system of harbor defense should be "case-mated works in several tiers, combined with open batteries, where the locations are favorable."* He adduces in support of his system, the opinions and facts stated by Sir Howard Douglas, Gen. Totten, and Commander Dahlgreen, all of them potent authorities. He also quotes the valuable testimony of Capt. McClellan.

The probabilities are very strong, that if the Russians had possessed such works on the land side of Sebastopol, they would have so protracted the siege, that the Crimean victory, vast as was its expenditure of blood and treasure, would have proved far more costly.

In proof of the correctness of the views just expressed in reference to case-mated works, see Major Barnard's essay. See pp. 35, 36, 37, 38, 39, 40. See also Sir Howard Douglas' statement pp. 31, 32.

*See Major Barnard's entire note E.

Of Major Barnard's views, which appear in these instances at once just and very happily expressed, take the following specimens:

"Bomarsund, alas for Bomarsund! or rather for the prestige of the mighty naval armament which would have assaulted it! *one single* 'masonry case-mated castle,' bade defiance to this proud armament, whose chief, concluding wisely that 'discretion was the better part of valor,' sent for 10,000 French troops, who with a few 16 and 32 pound guns, inland batteries, speedily reduced the work," p. 43.

BALTIMORE & OHIO RAIL ROAD.

We are in receipt of the Monthly Statement of the machinery department of this road, from which we condense the following results of running passenger and tonnage engines on the different divisions.

PASSENGER ENGINES.

	Average no. cars to train	Fuel.	Total no. miles run.	Total cost per mile.
First Division.....	9	Coal.	11,994	6.6
Washington Branch.....	8	Coal.	9,839	7.9
Second Division.....	6	Coal.	11,872	6.8
".....	6	Wood.	6,489	6.4
Third Division.....	6	Coal & Coke.	8,360	14.4
Fourth Division.....	6	Coal.	18,340	11.3
".....	6	Wood.	3,015	12.5
Parkersburg Branch.....	4	Coal.	6,194	6.1

TONNAGE ENGINES.

	Av. no. cars to train	Total tons each.	Total no. miles run.	Total cost per mile.
First Division.....	23	Coal.	94,250	16.7
Washington Branch.....	28	Coal.	5,240	7.9
Second Division.....	25	Coal.	60,732	13.7
Third Division.....	p. 8	Coal.	39,528	18.7
".....	16	Coal.		
Fourth Division.....	18	Coal.	24,840	14.2
Parkersburg Branch.....	15	Coal.	15,105	17.6

The total cost includes fuel, stoves and repairs.

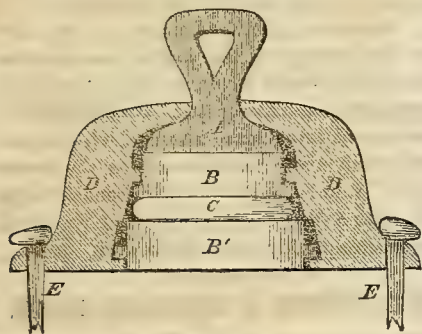
The difference in some of the above averages may appear strange, but are readily reconcilable when we know that the cost of fuel varies at the several points of supply, for wood from \$3.25 to \$4.50 per cord, and for coal from \$1.00 to \$3.25 per ton. On the first division the grades are 4 miles of 82 ft., and 96 miles not exceeding 40 ft., per mile. On the second division 9 miles of 48 ft., and 97 not exceeding 27 ft., while on the third there are 20 miles of 126 ft., and 10 miles of 106 ft., and 44 not exceeding 53 ft., and on the fourth 11 miles of 80 ft., and 89 miles not exceeding 53 ft., per mile.

Hunt's Magazine gives the aggregate cost of all the Railroads in Connecticut at \$245,377,739. We presume it has been led into this error from reading some of the New York R. R. papers—here we first noticed the mistake. The actual cost does not vary much from \$25,000,000, or about \$40,000 per mile.

A Kansas Railroad.

St. Louis, July 14.—A party of engineers left Wyandotte, K. T., this morning, to survey the Kansas Central Railroad to Fort Riley, 150 miles, being first railroad survey west of the Missouri River, and another link towards the Pacific.

CARPENTER'S RAILWAY CHAIR.



The wear and tear of railway bars is found to be very greatly modified by giving them a slightly yielding action underneath the train.

This was plainly observable in England, a few years since, when a company determined to construct a very "permanent way," by laying the rails upon solid stone blocks, and thereby render the track everlasting.

The experiment being tried, it was soon found that the rails were worn out much more rapidly than when laid upon wood, or some substance which permitted a slight elasticity. And we have been informed that in every case where this principle is not observed, the expense of keeping the track in repair is very greatly increased.

To meet this difficulty, some have proposed to place sheets of some elastic substance, such as gutta percha, upon the ties or piers, as the case may be, and thus enhance this elastic property.

Of these methods we have selected one that seems to us to well provide elasticity, and, at the same time, give great durability, without adding much expense. The peculiarity of the improvement consists in enclosing an elastic cushion within the chair, in such a manner as to be easily fitted to the rail and cross-tie, and yet so confined that it cannot work out of place by the action of the train.

In the sectional view given, A represents the rail, B and B' two circular disks of iron, between which is compressed the cushion, C. The disks and cushion are inserted into a circular chamber in the chair, D D, before it is placed upon the cross-tie, and before the rail is laid within it as here shown. The disk, B, is first inserted until its flange touches upon a projection in the upper part of the chamber, as shown; the cushion of gutta percha, or other elastic substance, is then placed upon it, and, to keep these in their proper position, the disk, B', provided with two inclined flanges in the form of a screw thread, is made to close the chamber, and is held firmly in the chair by its flanges catching upon two similar flanges in the bottom of the chamber, as here represented.

Two holes are drilled in the under side of the disk, B', into which a wrench may be inserted for turning it upon its inclined threads or flanges, so as to compress the cushion and permit the bottom of the disk, B', to rest upon the top of the tie, or even with the bottom of the chair.

These chairs are made of cast iron, and are provided with holes at each end for the spikes, E E, to pass through so as to fasten them to the cross-ties.

The cushion, C, is thus inclosed in a cast-iron box but with sufficient room to yield as much as is desired, and the rails, at the same time are permitted to work vertically, but not laterally, since they are enclosed between the

jaws of the chair. Letters patent were granted for this improvement, June 21, 1859, to Mr. J. M. Carpenter, of this city, but parties desiring further information concerning cost, efficacy, rights, etc., are referred to his agent, Mr. Wm. Ward, 65 Walnut street, where specimens may be examined.—*Scientific Artisan.*

THE AMERICAN R. R. REVIEW.

We have before us the first number of the *Railway Review*, a new candidate for Railroad patronage and favor. It is published by the "American Railroad Bureau," an association formed for that purpose. The Editors, in their opening article, say:

The first number of the American Railway Review is now presented to the public. That there is room for another periodical devoted to the discussion of railroad topics, is conceded by all intelligent men, and while we enter upon our duties as railroad journalists with diffidence, we do so with the confident belief that the vast interests of our railroad system deserve the best attention of the press.

The Review will be published every Thursday, at three dollars a year, payable in advance, by the American Railroad Bureau. It shall be the design of the paper to exhibit, from week to week, a succinct summary of railroad intelligence, and to discuss all important questions, connected with the construction, maintenance and management of railroads, intelligently, fearlessly and impartially. The Review will constantly aim at the perfection of the railroad system, not hesitating to censure whatever is wrong, in principle or conduct, and believing that true conservatism can reside only in integrity, and correct policy. We shall ever regard the interests of stockholders, of managers, and of the public, all reciprocal and mutual, resolutely exposing any measures or acts, calculated to depreciate the immense property vested in our American railroad system.

The "Review" is able, by its connection with the "American Railroad Bureau," to command, in a peculiar degree, both the talent and information required to make its columns interesting to railroad men. It will number, among its regular and constant contributors, many engineers of large experience and high qualification, while the widely extended agencies of the "Bureau" will constantly furnish information by correspondence and otherwise, such as no other journal can possess.

While we intend to make our paper acceptable, by its popular character, to the community at large, scarcely an individual of which is not interested, to a greater or less extent, in railroad progress, it shall be our endeavor, of course, to render it specially attractive to railroad men, all classes of whom will have occasion, as we trust, to find in its columns much to enlist their regard. To the engineering profession, we intend that the "Review" shall be welcome, and we solicit from the engineers of America, communications on subjects of professional interest, coming under their charge and observation, and for all such contributions used by us, liberal prices will be paid.

The railroad system, whether considered with regard to its vast extent, its prodigious cost, or its incalculable convenience, is a leading feature of modern improvement. The world can not do without it; and for its maintenance the highest degree of intelligence is demanded. The press can find few objects for

the exercise of its influence more worthy or important than the security and advancement of that system; the public has a direct interest in the success of every line which traverses the face of the continent, and justly hold those ways have no slight interest. Their condition as a class, only needs proper examination to correct passing evils of management, while their future, in a country like America, can be placed beyond contingency.

ASHTABULA & NEW LISBON R. R.

The following report from the contractors on the Ashtabula & New Lisbon Railroad, we clip from the Ashtabula Telegraph, which may be interesting to the stockholders and friends of the road on this division. It will be seen that these men speak favorably of the present prospects of this road, and feel confident of its success as a paying enterprise when completed. It is only necessary to insure its early construction, that those who have subscribed to the capital stock, should pay their installments promptly;

To the Stockholders of the Ashtabula and New Lisbon Railroad.—We have now at work on the road, between the center of Bristol and the town of Ashtabula, some one hundred and seventy-five men and teams. Several miles of the road are already graded and ready for the iron. As to the prospects of the road generally, they never were as good as at the present time; but to keep the prospects good, we believe the work should be prosecuted with vigor. As in our opinion a suspension of the work at this time would be very injurious, if not entirely disastrous to the enterprise.

Now, in order to keep even the small force we now have at work, we must have more pay, and that promptly. The most of you understood that the subscription, known as the \$60,000 subscription, was procured last fall, and after resolutions were passed by the company to that effect, the stock subscription was placed in our hands for collection, with instructions to go on with the work, and collect the subscription as fast as the terms of that subscription would allow. The first installment was made due in February last. We employed E. A. Wright, Esq., a well known citizen of Morgan, as our agent to collect. He says nearly every stockholder claimed, that if he could see the work progressing, he would pay, etc. We put the men to work, and have not been able to collect one-half enough to pay the estimates. It is not in our power to do work at every stockholders door, that he or she without any effort may see it done, we think it should be enough that the work is done somewhere on the line of the road, as their officers direct. A large amount of work has been done, and money expended; and those that have been the most liberal towards the enterprise, are anxious to see the return of their money. Can any one think of letting the work stop at this late date, when the road is so near ready for the iron, and all doubts removed as to obtaining the iron and rolling stock on reasonable terms? The necessity of the road is becoming more apparent every day. We are informed that parties have so much confidence in the minerals on the southern divisions of the road, that they are willing to furnish the iron, even though a passenger never pass over the road. We have never had any reason to abandon the idea of the full value of the stock, when the road is finished. We say that the advantages of the road, with its vast amount of coal, its through and local freight and passenger business, only needs to be known, to give it a standing among the first and best in Ohio.

Now, what is to be done? Shall we be under the necessity of abandoning the work, or shall we collect by law? or will the stockholders put shoulder to the wheel and give their united support? It is very important in all enterprises of this kind, that the contractors have the cordial support of the directors, engineers and stockholders, and under the circumstances is very essential to us. We would also state for your information, that we are at work on the southern division of the road. The amount of work done there last month was some fifteen hundred dollars, with a prospect of increasing, so that end of the road will be ready for the iron next fall. If you pay your assessments promptly, the work will go on lively, if we have collect it by law, it will cost you more and retard the work. If you do not pay, and we cannot collect, we have told you what would happen. *A word to the wise is sufficient.*

O. BALDWIN & CO., Contractors.

STREET RAILROADS.

The following are all the City Companies chartered up to this time:

Cincinnati Street Railroad Company.—Corporators: Alfred Buchanan, J. L. Vattier, C. J. W. Smith, John S. G. Burt, R. D. Handy, C. S. Kaufman.

The Fulton and Brighton Railroad Company.—Corporators: Joseph J. Davis, Andrew J. Mead, J. L. Vattier, Amos Tenney, Jonathan S. Niles, C. S. Kaufman, Marcus A. Finch.

The City Passenger Railroad Company.—Corporators: Rufus King, John C. Thorp, Jas. C. Moores, S. W. Ely, Wm. Kirk.

The Passenger Railroad Company of Cincinnati.—Corporators: J. P. Kilbreth, N. Headington, J. W. Donohue, Samuel N. Pike, Thomas G. Gaylord.

Metropolitan Passenger Railroad Company.—Corporators: Wm. Bromwell, Sam'l L. Peel, R. H. Stone, E. F. Carson, Wm. Heatt, Jas. L. Ruffin.

Pendleton and Fifth Street Market Space Street Passenger Railroad Company.—Corporators: John J. Hooker, Solomon L. Green, A. E. Jones, J. M. Scudder, Jas. H. Foster, O. P. Thorp, Chas. Rule.

The Avondale Omnibus R. R. Company.—Corporators: Miles Greenwood, Sam'l Cloon, Jabez Reynolds, Albert O. Tyler, William B. Caldwell, Richard Ashcraft, W. R. Phillips, R. Mitchell, William J. Irvin, William P. Neff, D. Collier, W. R. Nixon, C. Donaldson, S. H. Burton.

The Third Street Passenger R. R. Company.—Corporators: Harvey DeCamp, E. W. Cunningham, W. M. Greene, Wm. Wood, E. H. Carey, M. B. Ewing.

Buckeye Railroad Company of Cincinnati.—Corporators: Wm. Cameron, Edward M. Shield, Chas. F. Wilstach, Francis X. Wiedemer, Geo. Townly, Wesley M. Cameron, Alexander Starbuck.

The Queen City Street Railroad Company.—Corporators: James M. Niles, William Kelley, Irvin Camp, William M. Singerly, Richard J. McKenney.

The Lower River Road Improved Omnibus Railroad Company.—Corporators: E. Kleinschmidt, D. Z. Sedam, D. F. Goodhue, John Schnell, W. F. Goodhue.

Home Passenger Railroad Company.—Corporators: Selden S. Cooke, Noah L. Wilson, B. P. Kingsbury, Orland Smith, John Foggitt.

NEW R. R. PROJECT IN TEXAS.

The railroads, so far as we can learn, are all doing a fair summer business. Those on which work is being done, are moving along steadily. The Central will be open to the Navasota in the next fifteen days. A good deal of interest is felt, in Grimes and Walker counties, in favor of a proposed branch from the Central to Anderson and Huntsville. This is a very important movement, and one which will be of great advantage to all that country. If the road is extended eastward it will give the required facilities to all eastern Texas, and save the Trinity valley alone, by a moderate calculation, not less than a million and a half of dollars per year! It is estimated that, on the 100,000 bales of cotton which goes out of this valley by the way of Galveston and Shreveport—not less than an average of \$10 per bale has been lost, this year, by depreciation of the market. This cotton has been delayed in planters' hands an average of four months longer than it would have been with railroad transportation, costing the country, in interest, upwards of one hundred and fifty thousand dollars. The average extra cost of hauling the cotton by wagons over what it would have been by railroad has been at least \$3 50 per bale. To show this thing in a plainer form, look at the following table:

Depreciation in 100,000 bales of cotton, at \$10.....	\$1,000,000
Loss in interest.....	150,000
" " freight.....	350,000
	\$1,500,000

In this, we make no account of insurance, loss by sinking and burning of steamboats, tearing of bagging, etc., etc. The amount thus lost to that county this year for want of a railroad, would build a road without State aid, from the Navasota to within fifty miles of Henderson! What other argument need we use? But leaving out this depreciation in price, the actual saving on this cotton alone, if sent by railroad would, in four years, build and equip a road, from the Navasota to Henderson, AND DOUBLE THE WEALTH OF EVERY PLANTER WITHIN TEN MILES OF THE LINE, IN THE INCREASED VALUE OF HIS LANDS! Need more be said?—*Texas Telegraph, Houston, July 14.*

SAULT STE. MARIE CANAL.—A correspondent of the *Detroit Tribune*, writing from Sault Ste. Marie, under date of July 9th, says:

The Canal is a decided success. Its business is constantly increasing. Without it the vast mines of iron and copper on the shores of Lake Superior would be almost valueless.

To show the worth of the Canal, and the business of the Superior country, the following statement is given of the amount of work done by the canal during the months of May and June, for 1858 and 1859, viz:

	1859.	1858.
MAY.		
Steamers passed.....	16	21
Propellers do.....	25	12
Tugs do.....	35	4
Vessels do.....	44	20
Whole number.....	120	57
Amount of tolls.....	\$2,393 86	\$1,438 08
JUNE.		
Steamers passed.....	20	21
Propellers do.....	25	11
Tugs do.....	42	30
Vessels do.....	96	50
Whole number.....	184	112
Amount of tolls.....	\$3,294 04	\$2,088 56

From which it will be seen, that during the months of May and June, 1859, 135 more crafts passed than during the same time in 1858, with an increase in tolls of \$2,161 26.

SILVER MINING IN CENTRAL MEXICO AND ARIZONA COMPARED.

By HENRY HOWE.

Humboldt estimated the total produce of the silver mines of Mexico, from the time of the conquest by Cortez up to the year 1803, at seventeen hundred and sixty eight millions of dollars. Adding to this, that not registered, and it exceeded two thousand millions of dollars. Yet silver mining there, as a whole, has not, probably, been more remunerative than the unexcitable employment of cultivating the potato—often not even as much so. It has been the well managed mines and the exceedingly rich mines that have there suddenly yielded those immense fortunes to individuals, the mere mention of which is so alluring to the spirit of avarice, and which, in contrast, dwarf the largest fortunes acquired by trade in our own country.

The Mining Records of the Government of Mexico, made for the purposes of taxation, show that not unfrequently the annual produce of a single silver mine exceeded a million of dollars. Indeed, more than this was obtained, in the early part of this century, in one month, from the mine of El Pavillon alone. At different intervals, from the year 1793 to that of 1810, this mine produced, in eight months, (though not in consecutive months,) eleven millions of dollars. From the mine of Saint Eulalia, in the 86 years prior to 1791, was raised a total of one hundred millions of dollars. Similar statistics, to fill pages, could be introduced here, if these were deemed insufficient for illustration. Since the beginning of this century, the mining of silver has decreased in Mexico, from the political condition of the country, which has been so unfavorable to all industrial pursuits.

Silver mining in Arizona possesses some great natural advantages over silver mining in Central Mexico, the part of Mexico where that business has been mostly carried on. Many of the latter are in the midst of lofty mountains, hundreds of miles from the sea-coast; only to be approached by almost inaccessible paths on the backs of mules, or over roads constructed at immense expense, thus greatly enhancing the cost of supplies. Heretofore, the expense of transportation to the mines of Arizona have also been so great as to seriously retard their development. A desert without water intervenes a part of the way between Tubac and the coast of California, so that freight from San Francisco to the mines has, in some instances, amounted to hundreds of dollars to the ton. This has been imperious from the political, not geographical position of the country, for a good wagon road connects Tubac with the Mexican port of Guaymas, 325 miles distant. Lobos, in Sonora, it is expected, will eventually become the sea-port of the mining region of Arizona, from whence it is distant but 165 miles, over a level country, with good pasturage.

By the laws of Mexico, the transportation of machinery through its territories is free.—The basis of a treaty is now preparing between the agents of the Mexican and American Governments, which is to permit the free transit of merchandise across the State of Sonora to Arizona. This treaty will probably be soon completed, and a new impulse thereby given to mining operations, in the comparatively low cost of transportation; Guaymas and Lobos each being of easy and cheap access, by water, from San Francisco and New York—the latter place via the Isthmus of Panama.

But the great distinguishing advantage of silver mining in Arizona, is the *superior richness* of the ores, and in their *geological position*. That part of the silver deposit which in Central Mexico is sufficiently profitable to work, is generally found at great depths; while in Arizona rich *lodes* crop out at the surface. This confirms the theory of Humboldt in respect to the deposits of silver ore in North Mexico, viz: That the proportion of silver in the ore would be found to increase as you advance towards the North. This is accounted for, geologically, by the *dip* of the veins, the rich portion of which being near the surface at the North, recedes from it as the lodes tend southward, until, in Central Mexico, it is often found only at a depth of more than a thousand feet in the bowels of the earth. Hence the immense cost, there, of mining, growing out of the construction of deep shafts, enlarged systems of drainage, raising of the ores from deep levels, aggregates of machinery, increased amount of labor, etc.

The mines of the Real del Monte Company are of this character. One of these exceeds 1,700 feet, or more than a third of a mile in depth. Ward, in his work on the mines of Mexico, states that the main shaft of some of these deep mines alone cost a million of dollars, and that on the preparations for draining "the Great Biscania vein," nearly two millions of dollars had been expended when he left Mexico. By examining the statistics, (pages 28-32,) we find that in the year 1854, the Real del Monte Mines produced, in round numbers, 29,000 tons of ore—that these yielded \$1,812,000, of which \$696,000, or more than one-third, was net profit, and that the average value of these ores, by our calculations, reduced that year was short of \$63 to the ton, while the mere clay of the Heintzelman mine averages \$90—"too rich to be thrown away." Three years later, in 1857, these mines yielded over three millions of dollars, of which one-half was net profit. This was the result of deep mining with ores of but a moderate value.

If the comparatively poor ores of Central Mexico, mined at such great disadvantages, and at such enormous expenses, have often yielded immense returns to an inert and unskilled race, what may not be expected from our own people, when, under vastly superior circumstances, their energy and skill, and their desire for wealth, become the elements that fasten upon the business of mining for silver?

Gold, of late, by its accelerated production, has sunk in its relative value to silver; and this feature of this measure of property, in view of its continuous declination, is already attracting the attention of political economists. May not their estimates of results fail of a practical answer through the restoration of the equilibrium between these two leading precious metals by the increased production of silver? And is it too much to anticipate this restoration through the agency of American mind and industry, directed to this new channel now opening with so much of promise before them?

A sanguine calculator estimates the future annual yield of Arizona in silver, at one hundred millions of dollars. Mexico, the great silver bearing country of the world, has never yet exceeded an annual yield of thirty millions: it is not, therefore, probable that the dream of this Arizonian visionary will soon be verified. But when we perceive with what rapidity our population, in its advance to the Pacific, spreads over new territories—the en-

ergy with which it overcomes untold obstacles—the avidity it shows in launching upon novel enterprises, be they but promising—it is not, perhaps, too much to look for an honest measure of prosperity to that long, narrow strip of mineral bearing territory, purchased by Mr. Gadsden for us, of our Mexican neighbors, as a route for a railroad to the Pacific; and which, in a spirit of anticipation, has already received the dazzling appellation of the "SILVER STATE OF ARIZONA."

L'ANSE BAY AND STATE LINE RAILROAD.—A correspondent of the *Detroit Tribune*, writing from L'Anse, under date of July 11th, says:

We have finally got through our line, having reached the Brule River, the line between us and Wisconsin, on Monday, July 4th. It took four days to come back to this place.—Our last stakes numbers 85 miles, and is on the river on section 36, township 42 north, range 34 west.

This is the longest road in the upper Peninsula, and runs all the way through the wilderness. We commenced on the south shore of Portage Lake, in township 55 north, and followed, as near as possible, range line 33, after striking it.

The country, from Portage Lake to L'Anse Bay, with the exception of two miles, is fine rolling land, and will yield as well as any land in the State. At the head of the Bay, we were obliged to cross a swamp a mile and a half, as it was impossible, on account of deep gullies, to get around it. After we crossed this, we passed over a burnt pine district some four miles, and then struck a good section for farming. We passed many nice streams abounding in trout, and several lakes full of the finny tribe. Bear, deer and beaver abound along the whole line. After straightening our line a little at the head of the Bay, and at our starting point, which will take about three days, we shall be ready to make our report, and advertise for contracts.

FONTAYNE'S TELESMAIC PHOTOGRAPH.

In the short notice which we gave of this "magical light-writer" last week, we had only time and space to say that it would print from 3,000 to 4,000 perfect photographs in an hour. This, we then thought, was sufficiently marvelous to be believed by only a few of the most credulous. Since then we have become better acquainted with the capacities of the inventor and his machine, and we have no hesitation in saying that it can be made to far surpass even these marvelous figures.

Photographers have been able, for some years, to make paper exceedingly sensitive to the influence of reflected light; and one great difficulty with many of them, has been to so retard this sensitiveness, as that they could admit the rays of light, and instantly shut them out, without spoiling their paper.

This waste of paper, too, has been another serious objection, and has kept the prices of photographs ranging at high rates.

These difficulties Mr. Fontayne has been facing for years, earnestly working against them, and such has been his success, that his pictures have stood *first* wherever they have been presented.

Being cast upon what many supposed his death-bed, about the first of this year, he had time sufficient to classify his experiments, to theoretically meet his difficulties, and discuss them as they seemed to be presented.

The results we have already given, and, in reviewing the subject, we find that he makes the paper, upon which the picture is to be produced, *exceedingly* sensitive. This he dries, and places upon a cylinder in a dark case, having apparatus on the exterior by which the cylinder can be rotated. In the top of this case is an orifice through which the light can be admitted: and underneath this is the negative, so adjusted that it can be made to touch the paper, and leave it similar to the fly in a printing machine. Over this orifice and negative, is mounted a large condensing lens, of such power that a most intense light can be projected through the negative upon the paper beneath. But to prevent any action of the light, except as wanted, this orifice is closed by a slide which is adjusted in a frame, and so operated by coil springs, that its motion is *instantaneous*, and the orifice is opened and closed as instantaneously as the contraction of a coil spring can produce action. By means of connecting levers and cams, one operator can rotate the cylinder, cause the slides to move together in such a manner, that with one negative, one hundred flashes of light may be admitted per minute, and thus over 6,000 pictures may be given in one hour. But the same machine will admit as many as ten small negatives, all operated at the same time, and only requiring more paper.

His improvements also extend to the manner of toneing up these impressions afterward; for the paper, on being removed from the cylinder, is as white as when rolled upon it; but the *governor of the light is not mistaken*. The invention is truly a remarkable one, and will introduce some new flashes in photography.

—Scientific Artisan.

SUBMARINE TELEGRAPH.

On the importance of more frequent and more accurate Deep-Sea Soundings, in connection with the successful establishment of a Submarine Telegraph across the Atlantic; by Professor W. P. TROWBRIDGE, Assistant U. S. Coast Survey.

In the year 1849, two citizens of Philadelphia, Horatio Hubbell, Esq., and Col. John H. Sherbourne, presented a lengthy memorial to Congress, promulgating a plan for establishing telegraphic communication across the Atlantic ocean; and asking the Government to aid in carrying out the project. This memorial contained the announcement of the probable existence of a table land or plateau between Newfoundland and Ireland, in the following words:

"Your memorialists proceed to say that from many observations which have been made, there is incontestible evidence of the existence of a submarine table land extending from the banks of Newfoundland across the Atlantic ocean to the mouth of the British Channel." "This is proved by the altered color of the sea water, which has a different appearance, in unfathomable places, from what it has in shallow spots." "This, combined with the volcanic construction of Iceland and the Azores, and the situation of that portion of the ocean that lies between these volcanic groups, has led to the conclusion that there has been a lifting up of the bottom of the sea, through the agency of a Plutonic power, and that the bottom thus elevated appears to be cut through, in many places, by deep-water channels." "The appearance of Medusæ, Polypt, and other marine creations, seen upon the edge of the discolored water, strengthens this opinion." "Your memorialists propose that these suggestions should be investigated," &c.

The first experiments made to test the truth of these suggestions, was the soundings of

Commander Berryman, made in the summer of 1853. Previous to this time, no cast of the deep-sea lead had ever been made north of the Azores. The soundings of Berryman, and the subsequent soundings of Commander Dayman, have been variously interpreted concerning the proof of the existence of the submarine table-land, announced by Messrs. Hubbell and Sherbourne. In a popular sense, this announcement conveyed the idea of a vast unbroken level at the bottom of the sea, the existence of which has not been conclusively established by the soundings referred to.

The question, however, is one of very little importance, provided the irregularities of the bottom do not offer any serious obstacle to the safe descent of an electric cable, or cause its destruction subsequently. The question now presented is, taking the bottom of the ocean as it probably exists, with elevations and depressions corresponding to those found upon the face of the dry land, what influence will these elevations have upon the practical operation of depositing an electric cable, and in the preservation of the electric continuity.—Upon this point there has been very little discussion, on account of the popular belief in the existence of a level bottom across the only part of the ocean where a submarine telegraph has been supposed to be practicable. But even upon the line of the Atlantic telegraph, although there may not exist remarkable submarine mountains and valleys, yet it is not improbable that considerable elevations and depressions occur. The profile of Capt. Dayman differed essentially from that of Commander Berryman; so much so as to give rise to serious controversies with regard to the strict correctness of both, since to the probable uncertainties of the soundings, was added the uncertainties in relation to the intermediate depths, the soundings being made generally fifty to one hundred miles apart.

The explorations of Dayman and Berryman ought, therefore, to be regarded as general reconnaissance only, from which the true profile of the bottom can only be conjectured. In the explorations of the Gulf Stream, by the U. S. Coast Survey, Lieutenants Craven and Maffitt discovered, off Charleston, a series of submarine ridges and depressions several hundred fathoms in height and depth, in the horizontal distance of twenty to thirty miles. Such ridges and valleys would have been passed unnoticed in the explorations between Newfoundland and Ireland.

It may be taken for granted that a submarine cable should touch the bottom at every point; otherwise some parts of it must remain suspended across valleys, or chasms, of unknown depth and extent; under these circumstances, its continuity is endangered by its weight, its chafing at the points of suspension, the action of currents, and other causes.—Whether the Atlantic cable was destroyed by such influences or not, will probably never be revealed, but it may be important to examine how far a more accurate and detailed section of the bottom may diminish the risks which must always attend an enterprise of this character.

Such ridges and elevations as were found in the Gulf Stream, though moderate in height and depth, when compared with the great depths of the Atlantic, are yet of sufficient magnitude to be taken into account.

The facility with which the ocean is traversed upon its level surface, and its great horizontal extent, compared with its depth, are apt to give rise to inadequate conceptions of the real magnitude of the inequalities of the bottom,—inequalities which, upon dry land,

would be overcome with difficulty. But when it is intended to adapt a line to these inequalities, it is their real, and not their comparative magnitudes, which must be taken into account.

An accurate and detailed profile of the bottom is, therefore, necessary, in order to estimate correctly the total amount of cable required to reach from one point to another, following the curve of the bottom. This is important, not only in determining the total depth of cable necessary to reach from continent to continent, but also to show at what points a greater or less surplus over the horizontal extent is needed.

It is only by the aid of accurate knowledge upon these points that the practical operation of depositing a cable can be reduced to a positive degree of safety and certainty. It was shown in a paper communicated to the American Association for the Advancement of Science, at the Baltimore meeting, April, 1858, that in laying a submarine cable, *if the rate of paying out be equal to the speed of the ship, and if the speed of the ship be greater than the rate of descent of the cable in the water, the form assumed by the cable from the ship to the bottom will be a right line*, and there will be no tension upon the cable, *provided the bottom be a uniform, level plain*.—But if, from depositing upon a level bottom, a descending slope be reached, the cable, from the ship to the bottom, will form a large catenary, one end of the catenary being at the ship and the other at the crest of the descending slope.

The catenary will produce a dangerous tension upon the cable, if the descent of the slope at the bottom be very deep, unless the speed of the ship be slackened.

The failure of the first attempt to lay the Atlantic cable off the coast of Ireland was, doubtless, due to this cause. The bottom suddenly fell off from five hundred fathoms to seventeen hundred fathoms, a descent of seven thousand feet, and the same speed being kept up, with nearly the same rate of delivery, it was impossible for the cable to assume the form of the bottom, and a catenary of large dimensions must have been formed, causing the great tension which parted the cable. The same circumstances must occur on a smaller scale, when the depression is more moderate, even in deep water; and it may happen that a submarine valley is passed before the cable has had time to descend to the crests; in which case, if the surplus paid out between the crests be insufficient, there must inevitably be a catenary formed from one crest to the other, the effect of which can not be avoided or foreseen.

It may, therefore, be safely asserted, that, to avoid risk of breaking a cable in the operation of depositing it upon the bottom of the sea, *the speed of the ship should be regulated by the depth and form of the bottom*. If the principle be adopted of paying out a uniform surplus to suit all the inequalities of the bottom, there will not only be an unnecessary waste of cable in some places, but the surplus may fail to be sufficient in others, the result of which might be a rupture.

On the other hand, provided an accurate and detailed profile of the bottom be constructed, from which the exact length of cable required between any two points, however near together, can be determined, there is no reason why an irregular form of bottom should present any serious obstacle to the safe deposit of a cable, provided the speed of the ship be so regulated as to deposit the proper amount in the proper place; and it is only by follow-

ing this rule that risk of breaking from the weight of the cable can be avoided.

In conclusion, the following rules may be stated:

1. Soundings of unquestionable accuracy should be made at intervals not greater than ten miles, and where there is a steep slope of the bottom, at more frequent intervals.

2. From these soundings, a profile of the bottom should be made, in sections, upon a large scale, from which the length of the curve of the bottom may be calculated.

3. A chart should be constructed, based upon the profile, showing the rate of speed and delivery between the different stations, in order that the cable paid out may adapt itself, without tension, to the curve of the bottom.

4. The profile and chart should be used as guides in the operation of laying the cable.

There is a popular belief that many parts of the Atlantic, across which submarine lines of telegraph have been projected, are filled with mountains and valleys of vast magnitude. All that can be said on this subject is, that the reported measurements of great depths are neither sufficiently accurate or numerous to lead to any probable conjecture of the natural features of the bottom. And the needle-like elevations which have been represented to exist, are more the result of imagination than a representation of facts. Whatever the form of the bottom may be, an accurate profile of it is the only basis upon which any reliable calculations with regard to the practicability of a submarine telegraph can be made.

And with the help of such accurate profiles even where great irregularities of bottom exist, the risks of failure may not be so great as has generally been supposed. And it is not improbable that the Azores might be made an intermediate station between the two continents, notwithstanding the supposed rugged character of the bottom near them; while there is yet no proof that the bottom between the Azores and the Banks of Newfoundland is at all unfavorable to such a project.—*Amer. Journal*.

GRAIN TRADE.

The crops are on all hands reported to be very large, and this is not only the case in the United States, but in Western Europe and in Great Britain. In France, the state of affairs is represented by the following official figures, which give the imports and exports of grain for three years, and for five months of 1859, ending May 31:

IMPORTS AND EXPORTS OF GRAIN IN FRANCE.

	Hectolitres.		Excess	
	Imports.	Exports.	Imports.	Exports.
1856.....	9,464,605	313,463	9,171,142	
1857.....	4,237,943	355,750	3,982,203	
1858.....	2,380,688	5,155,272		2,775,584
1859—5 mos 1,010,980		4,999,619		3,988,639

Thus in 1858 the excess of exports took place for the first time in a number of years, and this has been followed by very active exports of the crop of 1858. The crops of Great Britain have also been very large, and have reduced the requirements from abroad to a considerable extent. The crops of Western Europe now promise to be, if possible, still larger, and the tendency of prices is still downward, a matter which would of itself have a very great effect upon the demand for food from the United States; but the French government has, in addition, taken a retrograde step. It will be remembered that, owing to the short crops of France for the last six years, grain has been permitted to be imported at a fixed duty of 25c., or adding the centimes, 30c., and this regulation was continued last

year, to Sept., 30, 1859. A decree has now restored the old sliding scale of duties, which imposes a rate of duty upon wheat and flour that must make the importation from the United States impossible for the future.

For the purpose of giving effect to the protective policy of France in regard to corn, the country is divided into four classes: The first class comprehends the South of France, being poor soil; the second, the South-West and South-East; the third, the East, the North, and part of the West; and the fourth, part of the West and North-East. These distinctions are made in reference to the supposed capabilities of the soil for the growth of wheat.

The following is the scale of duties applicable to the different divisions:

THE DUTIES ON WHEAT IMPORTED INTO FRANCE.

When price of the hectolitre is as follows: Duty by Duty by									
F. Ships foreign					or land ships.				
1st class.	2d class.	3d class.	5th class.		1st class.	2d class.	3d class.	5th class.	
1f. f.	2f. f.	3f. f.	5f. f.		1f. f.	2f. f.	3f. f.	5f. f.	
28	26	24	22	22	21	20	19	18	17
27	25	23	21	20	19	18	17	16	15
26	24	22	20	19	18	17	16	15	14
25	23	21	19	18	17	16	15	14	13
24	22	20	18	17	16	15	14	13	12
23	21	19	17	16	15	14	13	12	11
22	20	18	16	15	14	13	12	11	10
21	19	17	15	14	13	12	11	10	9
20	18	16	14	13	12	11	10	9	8
19	17	15	13	12	11	10	9	8	7
18	16	14	12	11	10	9	8	7	6

The duty then increases by 1f. 50c. for each franc that the price is reduced. The last line in this scale is very nearly the actual averages in France for the year 1850, and consequently the duty on the fourth class was very nearly 100 per cent., and on the first class 75 per cent. Thus when first class wheat in France is 25@26f., the hectolitre of 2½ bush., the import duty is 1f. 25c., or 8c. per bush., and when the average is 23f., the present price in Paris, the duty is 4f. 75, or 32c. per bush., and \$2.60 per bbl. of flour. This closes the export of United States breadstuffs to France. It may be useful to see what France has bought of late years:

EXPORTS FROM UNITED STATES TO FRANCE.

	Flour.		Wheat.	
	Bbls.	Value.	Bush.	Value.
1853....	6,100	7,200	8,784	\$40,600
1854....	.....	.....	8,557	68,849
1856....	1,924,339	3,948,434	523,399	4,556,158
1857....	1,327,128	2,466,496	184,803	1,191,547
1858....	32,579	41,371	10,908	49,397

Previous to 1853 there were no exports of wheat to France from the United States. The short crops that occurred during the Crimean war, led to the substitution of the fixed duty mentioned, and under which the trade has been so active. In the year 1855 the short crops in the United States caused prices to rise to such points that they were not available for export to France. The years 1856 and 1857 gave an active business however, which was again checked by the good French crops of 1857. The crop of 1858 was larger than over, and that of the present year promises to exceed even that. L'Echo Agricole gives the imports and exports, in hectolitres of 2½ bush., for the last 10 months; the first five months were embraced in the above figures for 1858 in the French trade. In 1859 there has been no exports to France, although in 1856 she took 4,500,000 bush., at a value of \$8,500,000. The restoration of the sliding scale prevents the renewal of that trade for the present. In order to observe the effect of the French crops upon Exchanges, we give the following values of the imports and exports of grain into and from France for three years:

	1856.	1857.	1858.
	Francs.	Francs.	Francs.
Imports.....	180,380,000	116,200,000	46,200,000
Exports.....	7,600,000	10,200,000	128,700,000
Excess import.....	172,780,000	106,000,000	
Excess export.....			82,500,000

The imports of wheat in 1856 and 1857 cost France \$50,000,000, and in 1858 she sold \$16,000,000 more than she bought. Thus instead of sending \$21,000,000 out of France to buy grain, as in 1857, she received \$15,000,000 for grain sold, making a difference of \$37,000,000 in the Exchanges; and there is no doubt but that this condition of the crops was a powerful motive with the French Emperor in his war operations. England last year was our chief customer for wheat; she took three-quarters of the wheat and one-third of the flour. This year she wants still less, but what she does require is supplied mostly by France. Thus in the first four months of the present year she has bought—

	Wheat.	Flour.
	Qrs.	Qrs.
Of France.....	310,306	959,694
Of United States.....	25,28	22,930
Of other countries.....	737,532	87,037

Total.....qrs. 1,051,326 10,69,661

Thus France has this year thus far furnished one-third of the wheat and nine-tenths of the flour, and both countries now, with falling prices and good crops in Germany, approach new and abundant crops. This is the state of affairs which the Western country has now, with heavy debts and large crops, to face. In the Spring the war news propagated one of the wildest follies in a rapid rise in prices, as if a mere war would cause a demand for food. That rise involved the most active speculators in serious losses, and will cripple the operations for the new crop. The decline has been very serious at all points. The Chicago papers quote a decline of 61c. on wheat, in face of large crops and no foreign demand.

The crops at the West being very good, the prices which they will realize to the grower must be far from satisfactory. The West is largely indebted to the East not only for goods sold to them and not yet paid for, but for moneys advanced upon lands at high rates of interest for railroads and various matters. Those debts were mostly contracted when prices of produce were high, and have now to be paid when prices are likely to be very low. In 1856 there were received at Chicago 8,767,760 bush. of wheat, which sold at an average of \$1.20, or \$10,521,000. In 1858, \$10,621,302 bush. sold at an average of 75c., or \$7,900,000, not counting the flour. The growers gave 1,900,000 more bush., and received \$2,600,000 less money. A leading cause for the decline in the price then was that the rush of migration having stopped, there was no longer any market for produce at the door of the farms—all the surplus was obliged to be forwarded, and this will be the case with the new crops. They will all press upon the great centers of business without an outlet, and when the home demand is supplied the prices may fall to rates that will force an export. At all events, the debt which was due from the West to the East will require to be paid with nearly double the number of bushels of grain—an immense profit to the East, and some compensation for the vast sums the West has drawn of late years.—*Economist*.

A car on the Dayton and Western Railroad was precipitated down an embankment on Tuesday morning, near New Paris. Some half-dozen persons were severely, though not dangerously injured.

Grand Rapids and Indiana Railroad.—The public will be glad to learn that a settlement has been effected between this company and Mr. Beckel, of all their matters of difference, and that Mr. Beckel has now surrendered possession of the road to the company.

PROPOSITIONS FOR STREET RAILROAD ROUTES.

CITY COUNCIL PROCEEDINGS.

Mr. Torrence, from the Committee, made a report upon the propositions for Street Railroad routes. Bid No. 1 is blank.

Third Street Passenger Railroad Company Proposition.—The Third Street Passenger Railroad Company, consists of Harvey Decamp, E. W. Cunningham, W. N. Greene, Wm. Wood, E. H. Carey, and M. Ewing. They submit the following sureties, viz: Thos. G. Gaylord, S. N. Pike, Wm. J. Dunlap, John C. Thorp, W. W. Scarborough, Ben. Jenifer, James Gilmore. They bid as follows:—*Bid No. 2 for Route No. 4.*—Annual license for each car, \$25. For each passenger carried, one cent. Will sell commutation tickets, 25 for one dollar.

Home Passenger Railway Company Proposition.—The Home Passenger Railway Co., Selden S. Cook, President—offer the following sureties, viz: Wm. Wood, Wm. Dunlap, W. W. Scarborough, James Gilmore, John C. Thorpe, S. N. Pike, and M. B. Ewing. They propose, *Bid No. 3 for Route No. 5.*—Annual license for each car, \$30. For each passenger carried, one cent. Commutation tickets, 25 for \$1.

The Passenger Railroad Company of Cincinnati—Proposition. The Passenger Railroad Company of Cincinnati, through J. W. Donohue, President, and N. Headington, Secretary, offered the following securities, viz: S. N. Pike, Wm. Wood, E. W. Cunningham, James Gilmore, Wm. J. Dunlap, W. W. Scarborough, James C. Moores, and Harvey Decamp. They propose, *Bid No. 4 for Route No. 2.*—Annual license per car, \$25. Per passenger carried, one cent. Commutation tickets, 25 for \$1.

The City Passenger Railroad Company's Proposition.—The corporators of this Company are Rufus King, John C. Thorp, James C. Moores, S. W. Ely, and Wm. Kirk, who offer the securities named in bid four. They propose, *Bid No. 5 for Route No. 1.*—Annual license, per car, \$30. Per passenger carried, one cent. Commutation tickets, 25 for \$1.

Queen City Railroad Company's Proposition.—*Bid No. 6 for Routes, 1, 2, and 4, or either.*—Annual license per car, \$5 for the first five years, \$10 for the next five, \$15 for the next five, and \$20 for the next five years. Per passenger carried, nothing. Commutation tickets four cents each. No securities named.

Cincinnati Street Railroad Company's Proposition.—This Company offers for securities Alfred Buchanan, J. S. G. Burt, C. J. W. Smith, C. S. Kaufman, and Dr. J. L. Vattier. They propose: *Bid No. 7, for Route No. 1.*—For each one horse car, annual license \$25, and two horse cars \$50. Per passenger carried at 5 cents, one half cent for the first ten years, three-fourths of a cent for the next five years, and one cent for the next five years. Commutation tickets, 25 for ninety cents.

Same Company for Route No. 2.—For each one horse car \$25 per annum; for each two horse car \$50. For each passenger carried, one-fourth of a cent for the first five years, two-thirds of a cent for the next seven, and one cent for the next eight. Commutation tickets, 25 for 90 cents.

Same Company for Route No. 5.—For each one horse car, \$25, and each two horse car

\$50 per annum. For each passenger carried at 5 cents, will pay the city half a cent for 5 years, three-fourths of a cent for the next seven, and one cent for the next eight years. Commutation tickets, 25 for 90 cents.

The Fulton and Brighton Railroad Company's Proposition.—This Company offers for securities, T. C. Day, Edgar Conkling, Chas. Ernst, James E. Murdock, and W. M. Herter. They propose: *Bid No. 8 for Route No. 4.*—For each car annually, \$25. For each passenger carried for 5 cents, one-fourth of a cent for the first 10 years, next 10 years three-fourths of a cent. Commutation tickets, 25 for one dollar.

For Route No. 5 by same Company.—Per car annually, \$100. For each passenger at 5 cents, will pay a half-cent for the first seven years, three-quarters of a cent for the next seven, and one cent for the next six years.—Commutation tickets 30 for one dollar.

Same Company for Route No. 4.—Per annum, \$25. Will pay one fourth of one cent for each passenger carried for the first five years; three-eighths of a cent for the next seven years; three-fourths of a cent for the next six years. Commutation tickets, 25 for \$1.

Same Company for Route No. 5.—For each car per annum, \$75. For each passenger carried at 5 cents, for the six years, will pay one third of a cent; for the next six years five-eighths of a cent; and one cent for the next eight years. Commutation tickets, 28 for \$1.

Wilson & Co's. Street Railroad Company's Proposition.—The corporators named are W. C. Neff, J. L. Keck, A. Cutter, and B. Higdon. They offer as securities Briggs Swift, Wm. C. Maun, V. Nichols, J. H. Pulte and T. G. Gettier. They propose: *Bid No. 9 for Route No. 2.*—For each car (*Bid don't specify time*) \$100. For each passenger carried, one cent. Commutation tickets 25 for \$1, and pay to the city a tax of \$10 per annum upon each car.

Pendleton and Fifth Street Market Space R. R. Co's Proposition.—The corporators are Charles Rule, A. E. Jones, Sol. L. Green, J. H. Hooker, O. P. Thorp, Jas. H. Foster, and John M. Scudder. They offer as securities Griffin Taylor, John C. Culbertson, E. S. Haines, Chas. H. Kilgour and Chas. Rule.—They propose *Bid No. 10.*—*Pendleton and Fifth Street Market Space R. R. Co., for Route No. 5.*—For each car annually, \$25. Blank. Commutation tickets 25 for 90 cents.

Metropolitan R. R. Co's Proposition.—Wm. Bromwell, James L. Ruffin, Enoch T. Carson, S. Peel and R. H. Stone, are the corporators. They name the folling securities, viz: T. J. Melish, B. Higdon, Wm. E. Edmeston, Chas. Brown, Thos. Kirby and E. T. Carson. They propose *Bid No. 11.*—*Metropolitan Passenger R. R. Co., for Route No. 1.*—For each car per annum, \$100. For each passenger at 5 cents, they will pay one-fourth of a cent for the first five years, three-eighths of a cent for the next five, and three-fourths of a cent for the next ten years. Commutation tickets, 25 for one dollar.

Same Co., for Route No. 2.—For each car per annum, \$50. For each passenger at 5 cents, will pay, for the first five years, three-eighths of a cent, for the next five, two-thirds of a cent, for the next ten years, one cent.—Commutation tickets, 28 for one dollar.

Wilson & Co's bid, No. 9, came up for discussion, upon a motion to amend it. The Committee said it did not specify whether the company offered \$100 per car per annum, or simply \$100 per car for the entire time. Several members stated that they were authorized

by one of the corporators to say that the omission of annual was a clerical error.

At Mr. Mack's suggestion, the proposition was read, and the majority of Council decided that as "\$10 per car per annum" was also specified in the bid, the company did not mean to offer \$100 per annum, and, therefore, the claim to amend was disallowed.

After discussion upon the disposition of the report, it was determined to print the entire batch of propositions and routes, and make the subject the special order for a meeting to be held to night.

DECISIONS OF THE COURT OF APPEALS OF KENTUCKY.

Reported expressly for the Yeoman by CHARLES F. CRADDOCK, Attorney at Law, Frankfort, Ky.

PHILIPS
vs.

THE COV. & CIN. BRIDGE CO.,

Kenton Circuit Court.

This action was brought against the appellant on a writing subscribed by him as follows:

"We, the undersigned, hereby Subscribe and promise to pay the Covington and Cincinnati Bridge Company the respective amounts attached to our names, as subscription for stock in said company, payments to be made at such times and in such amounts as shall be demanded by the directors of said company, provided no demand shall be made until after the sum of four hundred thousand dollars shall have been subscribed, including those of ours."

The defense to the action was, that the sum of four hundred thousand dollars in actual available stock had not been subscribed when the demand upon defendant was made.

The company recovered judgment, and this appeal was prosecuted by Philips.

The principal questions in the case relate to the validity of some of the subscriptions of stock which the jury were permitted by the court below to take into estimate in determining what amount of stock had been subscribed before the appellant was called upon for payment of his subscription. These questions are:

1. The city of Covington subscribed \$100,000. That subscription was objected to on the ground that the city had no authority to make it.

2. Stock was also subscribed by contractors, which some were to pay in work and materials, and some in services. These were objected to because they were not payable in money, and because their payment depended upon the continuation of the work, and were therefore conditional in their nature.

3. In the contract with the Buena Vista Stock Company and the bridge company, the former are allowed the privilege of converting one-half of the stock which is subscribed into 8 per cent. bonds of the bridge company, so soon as it may issue any such bonds.

The court, per Chief Justice Simpson, held—That the city had the right to make the subscription under the act of the Legislature of February, 1856, (1 vol. Ses. Acts, 1855-56, page 315,) entitled "An act to amend the charter of the Covington and Cincinnati Bridge Company." This act is not in violation of the 37th section of the 2d article of the Constitution, which declares that "no law enacted by the General Assembly shall relate to more than one subject, and that shall be expressed in the title."

The purpose of this provision was to prevent a practice which had grown up of inserting in the same act of the Legislature subjects which had no relation to each other, and where the title gave no indication whatever of some of the subjects of the bill; and to prevent the improper influences which were brought to bear on the passage of such bills by a union of such incongruous subjects in the same bill.

It was not intended to restrict legislation to such an extent as to render different acts necessary, where the whole subject matter is connected, and may be properly embraced in the same act.

This prohibition should receive a reasonable and not a technical construction, and keeping in view the evil designed to be remedied, should be applied to acts of the Legislature only that are obviously within its spirit and meaning.

Where the provisions of a statute relate, directly or indirectly, to the same subject, they have a natural connection, and are not foreign to the subject expressed in the title, the prohibition should not be applied.

The first section of the act referred to the capital stock, which was increased to \$700,000.

The second, and only remaining one, gave power to the company to sell \$100,000 of the stock of the city of Covington, to be subscribed and paid as might be agreed on by the company and the city, and in payment the city might sell her bonds to the amount of \$100,000, the amount of every bond and the times and places of payment of principal and interest, to be fixed by said city—the city being authorized to levy a tax of 10 cents on the \$100 worth of taxable property therein in 1856 and 1857 for the purpose of paying the interest on the bonds.

The power conferred on the Bridge Company to sell, and on the city to subscribe and pay \$100,000 of the stock, is all that is involved in the question under consideration.

The provision, as relates to the Bridge Company, it is not denied, is consistent with the title of the act; but it is contended, as it relates to the city of Covington, it is entirely foreign to the object therein indicated.

The power to sell stock to the city necessarily required a power to be conferred on it to subscribe and pay for it; for

without such power, the power to sell would be nugatory. The subject is the same, although it relates to a transaction to which two corporations are parties, one of whom only is named in the title of the act. If the act had given the city power to subscribe stock in any other than the company named in the title, then the provision would fall within the prohibition. But as the subscription relates to the stock in the Bridge Company, so far as the action of the city is concerned, relates to subscription to that company by the city, the title of the act is sufficient, and sufficiently expressive of what is in it.

The fact that after the city had subscribed and paid \$10,000 on the subscription, the company took the city's bonds at par for the balance, when the bonds were not worth par, can only raise a question as to the power of the company so to receive payment—a question not involved here.

The subscription was made without condition, just as other subscriptions, and no after action of the company can affect the legality of it as to amount. If the company by receiving bonds, was injuring other stockholders, they could have applied a remedy. The court did not therefore err in the instruction to estimate the city subscription at \$100,000.

The proof showing that the materials to be furnished in payment of stock were at as low prices as they could have been bought with money, the compensation to be allowed for services reasonable, and the stock given therefor at par, no valid objection existed on these grounds to calculating the stock taken for these matters in ascertaining the amount subscribed.

The contracts contemplated a regular progress of the work to completion, and therefore the subscription in services and materials were not conditional.

The instructions given for appellant, "that the subscriptions of persons making contracts with the appellee for work on and materials furnished for the construction of the bridge should be computed at their value to the appellees at the time they were made, as compared with the value of subscriptions payable in money," was correct.

This gave power to the jury to reduce the nominal amount of the stock aforesaid, if they believed it was of less value than stock payable in money. And the instruction to the jury, to exclude the stock of persons insolvent, infants and married women, unless such subscriptions had been paid, was also correct.

The remaining question about the contract with the Buena Vista company does not affect the validity of the subscription of stock. The privilege to pay the bonds is only to the bridge company, and will not be carried into execution unless to the interest of that company.

If the stock should be of less value than the 8 per cent. bonds, the bridge company would have no right to issue them to the prejudice of other stockholders.

Judgment affirmed.

Railroad Presidents, Superintendents and Secretaries, are requested to send us copies of all Annual and other Reports they may issue, together with their Monthly Statements, and such other matters of interest as they may be willing to furnish us

MONETARY AND COMMERCIAL.

The Buffalo Commercial Advertiser of the 19th, in an article on the Wheat crops of 1859, says:

"The New York Courier and Enquirer of yesterday, has an able and elaborate article on the national wheat crop of 1859, based on the Patent Office Reports of previous years, and such information as it otherwise possesses. The following tables contain the essential portion of the statistics adduced.

The production of Wheat in the several States for 1858 and 1859, may be stated as follows:

Since our last demand for money has been quite moderate, although during the last three days of the week, a more active demand has been experienced. It has however been freely met at customary rates.

The Missouri Bank Note question which has annoyed our citizens for so long, has been finally settled. On this subject the PRICE CURRENT says:

"The conflicting opinions entertained by bankers regarding the Missouri currency, have been the source of no little annoyance to them during the whole week, and the disposition displayed by some of them to keep the paper on a par basis, and by others to throw it out, kept up a disagreeable conflict between them; but the fact that a premium was charged for Exchange in redeeming \$150,000 of the currency sent home last Thursday, and intimations which rendered it exceedingly probable that the rate would be put up to 1 per cent., gave the latter party the advantage, and one of them refused the paper Monday. An advertisement of the St. Louis Savings Institution, offering to take Ohio, Indiana and Kentucky currency, at a premium, in exchange for Missouri currency, seemed at length to open the eyes of the obstinate ones and this morning all the houses agreed to place the paper of the Missouri country banks at a discount of one per cent. The notes of the city banks of St. Louis are taken at par, but there are none of them here, and the quantity of country bank currency in circulation is exceedingly small, so that the change has been made at a most favorable time.

We would say that the Bank of the Ohio Valley continues to draw at a premium as heretofore, for its customers and selected paper, and our inside quotations refer to this, and our outside quotations to two other houses only:

BUYING.		SELLING.	
New York Sight.....	1@1 1/2 prem.	1@1 1/2 prem.	
Boston.....	1@1 1/2 prem.	1@1 1/2 prem.	
Philadelphia.....	1@1 1/2 prem.	1@1 1/2 prem.	
Baltimore.....	1@1 1/2 prem.	1@1 1/2 prem.	
New Orleans.....	1/2 dis.	par.	
American Gold.....	37@40 prem.	1/2 prem.	

WHEAT.			
	1857.	1858.	1859
New York.....	22,000,000	20,000,000	22,000,000
Pennsylvania.....	20,000,000	20,000,000	25,000,000
Virginia and North Carolina.....	20,000,000	18,500,000	20,000,000
Kentucky.....	10,000,000	8,500,000	11,000,000
Ohio.....	25,000,000	22,000,000	26,000,000
Indiana.....	15,000,000	13,000,000	17,000,000
Illinois.....	18,000,000	14,500,000	20,000,000
Other States.....	50,000,000	42,000,000	60,000,000
	180,000,000	158,500,000	201,000,000

The production in the Western States, which have the largest surplus for export, is shown by the following figures:

WHEAT.			
	1857.	1858.	1859.
Kentucky.....	10,000,000	8,500,000	11,000,000
Ohio.....	25,000,000	22,000,000	26,000,000
Indiana.....	15,000,000	13,000,000	17,000,000
Illinois.....	18,000,000	14,500,000	20,000,000
Total.....	68,000,000	58,000,000	74,000,000

The surplus for the present year in these States, may be estimated as follows:

	Bush.
Crop 1859.....	74,000,000
Consumption five bush. per head.....	36,000,000
Surplus crops 1859.....	38,000,000

It is estimated that, in addition to this, from one-sixth to one-fifth of the surplus crop of 1858 is yet in the hands of the producers. We therefore have in the States, estimating last year's surplus crop of the West at twenty-four millions of bushels as the gross:

	Bush.
Surplus crop of 1859.....	38,000,000
Sixteen 2-3 per cent. on 1858.....	4,000,000

Total for export.....42,000,000

The transportation of this at forty cents per bushel, will give nearly seventeen millions of dollars to our canals and railroads.

The prominent figures here, are those stating the entire crop at 101,000,000 bushels, and the surplus for the year at 33,000,000. Of course these figures are only intended to be approximate, as the entire crop can only be got at by loose general estimate; no truly accurate statistics being in existence. We have, however, a means of partial comparison in the statistical records of our own office, which, while they do not cover the national crop, are perhaps the most reliable of any, so far as the grain movement out of the west is concerned. In them we necessarily include Canada, as under the Reciprocity Treaty no distinction exists between it and the production of our own country. Our basis of estimate is derived from the railroad and custom house returns of all the principal receiving points of western produce. All the surplus grain of the west, on its way eastward, passes through certain ports of entry and is there recorded. We have endeavored to cover all of these.

In 1858 the following Points received the amount of wheat stated. (Flour included and reduced to wheat.)

Received at.....	Wheat bu.
West. Ter. Balt. & Ohio R. R.....	2,411,570
West. Ter. Pa. C. R. R.....	2,250,000
Dunkirk.....	1,821,484
Ruffalo.....	18,807,509
Suspension Bridge.....	304,144
Oswego.....	70,510.32
Ogdensburg.....	2,698,298
Cape Vincent.....	773,356
Montreal.....	5,094,857
Rochester (by lake).....	301,065

Total Western Export.....42,530,915

We claim for these figures a strict accuracy, and if they are correct, the *Courier and Enquirer* estimate of only 38,000,000 bushels surplus is too small. It is less than the surplus of 1858 with its short crops. If we add to these the receipts at Cincinnati and St. Louis, which cities have a considerable grain trade for southern export, we shall probably express pretty nearly the total surplus of wheat for 1858.

Received as above.....	42,530,915
" at St. Louis.....	5,996,955
" at Cincinnati.....	4,368,143

Total Western surplus of 1858.....52,696,003

This fifty two millions of bushels of wheat is what the west exported last year. In the west we included Canada West and Kentucky as well as the States south and west of the great lakes, an immense area. But few eastern states are aware of the greatness of this trade in agricultural products. The Patent office estimate of 1855 was accused of exaggeration, in stating the entire national wheat crop at one hundred and sixty-five millions of bushels; but we do not doubt that it was much smaller than the reality. The population of the producing region included in our table is not less than 9,000,000 souls. At the usual estimate of consumption, 5 bushels per head, they would consume on the ground 45,000,000 bushels. Add to this the surplus exported in 1858, and we give a total production to that region of nearly one hundred millions of bushels. In order to get at the national product of wheat, we must add the entire crop of the New England States, New York, Pennsylvania and all the Southern States and Territories, except Missouri and Kentucky which are otherwise included. The *Courier and Enquirer* therefore cannot be far wrong in putting the national production of 1858 at 158,000,000 bushels, or in estimating that of 1859 at 200,000,000, it only errs, therefore, if at all, in the smallness of its surplus from the west. And as the product of the Atlantic States is about equal to their consumption, the surplus of the west really expresses pre-

ty accurately the surplus for export across seas. Estimating the population of the United States and territories at 30,000,000, and allowing 5 bushels per head, we have a home consumption of 150,000,000 bushels; and a surplus of 50,000,000 for export, provided we have any export demand, a contingency which we fear will depend upon low prices here rather than high prices abroad.

But with this immense agricultural production on a single state, should not our national policy look to some means for its consumption? Some outlet for the wealth of the national granaries? We have none now. In order to find a consumer for our surplus 50,000,000 bushels of wheat, enough to feed ten millions of people for a year, we must send it three thousand miles across the ocean, to a country where manufactures are prosperous. We quote from the *Courier and Enquirer* on this point, as a fitting lesson to be derived from the consideration of these statistics.

"With export prices we should doubtless have a movement of the crop never before witnessed, but as this is dependent upon two things, namely, the continuation of the war and poor crops in Europe, we shall perhaps witness no unusual movement. Our people have not in getting political independence got or even learned the value of Commercial independence. We are, therefore, dependent upon a foreign demand. If now the producer and consumer were both in this country, if our manufacturers used our raw material and our producers and home manufacturers, we should not have the anomaly of people almost fearing too large a crop and hoping for disasters to their neighbors almost, to enable them to sell their surplus. When will we learn wisdom?"

RECEIVER'S SALE.

BY virtue of a Judgment of the Court of Common Pleas, of Muskingum County, Ohio, rendered in a certain case therein pending, in which the "Clinton Bank of Columbus is Plaintiff, and Douglas, Smith & Co., and others, are Defendants. I will offer for sale, at the Court House, in the City of Zanesville, in the said Muskingum County, at the hour of one o'clock, in the afternoon, on the 6th day of December next, the following described parcels of land, situated in the Western Addition to the said City of Zanesville, as the same is designated and delineated upon the plat of said addition, recorded in the Recorder's office, of said county, in the Record of Plats, Book No. 1, page 13, &c.; that is to say, Lots Nos. 1, 2 and 3, of square 17, in said "Western Addition," appraised at \$150 each. Lots Nos. 4, 5 and 6, of said square 17, together with the strip of land between the south-eastern ends of the said lots, and lots Nos. 10, 11 and 12, in the said square, said strip of land being about 16 feet wide, with the buildings erected on the said lots and strip of land, and the fixtures and appurtenances thereunto belonging, appraised at the sum of \$6,500.—There are erected on the said lots, a brick shop, for the manufacture of passenger cars, 120 feet by 50 feet, roofed with slate, and also a wood car shop, 120 by 40 feet; steam engine and Boilers; 2 Daniels' Planing Machines; 1 upright saw; 1 Turning Lathe, Shaftings, Cones, Pulleys, Hangers, &c., connected with said machinery.

Lots Nos. 7, 8, 9, 10, 11 and 12, of said 17th square, with the buildings erected thereon, and the fixtures and appurtenances thereunto belonging, appraised at \$7,000. There are erected on said parcels, a Brick Machine Shop, 80 feet by 40 feet; a Forge Shop, 40 feet by 40 feet, containing 8 forges; a Carpenter Shop, 120 feet by 26 feet. Foundry buildings, one Lathe, 6 feet swing; 1 Boring Machine; 1 large Screw Cutting Machine; 1 Planing Machine; 3 Hand Lathes; 1 large Drill Press; 2 small Drill Presses; 1 wheel press; 1 Foundry Fan; 2 Screw Cutting Machines; 1 small Drill Press; Shaftings, Pulleys, &c., used with said machinery.

Lots Nos. 1, 2, 3, 7, 8, 9, 10 and 11, of square 21, in said Western Addition, appraised at \$150 each.

Lot No. 4, in said square 21, on which is erected a small dwelling house, appraised at \$250.

Lots Nos. 5 and 6, in said square 21, with the buildings thereon, and the fixtures and appurtenances thereunto belonging, appraised at \$800, on which lots is erected a large Foundry building, with Crane, Cones, &c.

Lot No. 12, in said square 21, on which is erected a stable, appraised at \$250.

Lots Nos. 1, 2, 3 and 4, in square 16, in said Western Addition, on which is erected a large frame building, appraised at \$1,000.

Lots Nos. 5, 7 and 8, in said square 16, appraised at \$150 each.

Lot No. 6, in said square 16, appraised at \$175.

The said parcels of land are situated on the line of the Central Ohio Railroad Company, on the west side of the Muskingum River, and immediately opposite the city of Zanesville, and formerly occupied, in part, by the Machine Shops, Foundry, Car Manufactory, &c., of Douglas, Smith & Co., known as the "Muskingum Works." The "works" are well arranged and convenient, and have capacity for a force of from 100 to 150 men. The location is healthy, and the facilities for procuring pig iron, coal, &c., &c., render the location one admirably adapted for such "works." Terms Cash.

And I will also, on the 7th day of September, 1859, at one o'clock, P. M., at the said "Muskingum Works," offer for sale the following personal property used in said "works," to wit:

2 Axle Lathes, 22 inch swing; 1 Axle Lathe, 26 inch swing; 1 Slide Lathe, 20 inch swing; 1 Slide Lathe, 15 inch swing; 1 Slotting Machine; 1 small Slide Lathe; 2 Slide Rests; 1 Grind-stone, with shafts and fixtures; 8 Blacksmith vices, work benches and clamps; 1 Screw Cutting Machine, No. 40; 12 large Anvils; 13 sets Blacksmith Tools; 2 Ripping Saws; 1 Cut-off Saw; 1 large and 1 small Tenoning Machine; 1 Tongue and Grooving Machine; 1 Mortising and 1 Boring Machine; 1 Caul.—Terms Cash.

JOHN TAYLOR, Jr., Receiver.

July 28 15

ST. JOSEPH AND MARYVILLE RAILROAD.—A meeting of the stockholders of this road was held on Wednesday, and everything passed off harmoniously. The following gentlemen were elected directors: John H. Likens, Silas Woodson, R. M. Stewart, Fred. W. Smith, M. Jeff. Thompson, Sam'l. P. Blair, Sinclair Miller, A. L. Lee, and Frank Marshall. After which the following officers were chosen: President, M. Jeff. Thomson; Secretary, W. R. Likens; Treasurer, Jas. M. Wilson; Chief Engineer, John Severance. The work was to have been commenced Thursday, and soon the iron horse will be heard snorting over the fertile plains of Kansas, on his way to the Pacific.—*St. Jo. Journal*.

HLATTE COUNTY RAILROAD.—At a meeting of the stockholders, held on the 13th inst., the following gentlemen were elected Directors:

William Osborne, William L. Irvine, John Curd, Israel S. Parker, R. A. Park, J. S. Kellogg, E. J. Catledge, A. P. Parker, H. B. Palmer.

At a subsequent meeting of the Board, Wm. Osborne was elected President of the Railroad Co.; Richard A. Park, Secretary and Treasurer; John S. Kellogg, Auditor; and John Severance, Chief Engineer.

The by-laws were adopted, and the President authorized to let the whole or a portion of the road.

An installment will be immediately called in on the stock, and the work vigorously prosecuted.—*St. Louis Bulletin*.

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PAN OR SANDOVAL

FOR

Decatur, Springfield, Bloomington, Peoria, Burlington, Quincy, La Salle, Rock Island, Dixon, Galena, Prairie du Chien, St. Paul, and St. Anthony, And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PAN OR SANDOVAL for all the above points. Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via

PAN OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DU- BUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

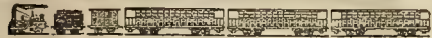
Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS, Gen'l Southern Agent, Cincinnati.

W. P. JOHNSON, Gen'l Passenger Agent, Chicago.

June 21, 1859.

Cincinnati, Hamilton and Dayton



RAILROAD.

FOUR TRAINS

LEAVE THE SIXTH STREET DEPOT DAILY.

TRAINS RUN THROUGH TO RICHMOND, LIMA, SANDUSKY, AND DELAWARE WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND NORTH-WESTERN CITIES.

(Columbus time, which is seven minutes faster than Cincinnati.)

6 A. M. EXPRESS TRAIN—For Cleveland and Pittsburgh, via Delaware, makes close connection at Crestline for Pittsburgh, Baltimore, Philadelphia and New York; and at Cleveland for Dunkirk, Buffalo, Boston and New York. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 7:20 P. M., Quincy and Galena at 7 A. M. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Muncie. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

8 A. M. MAIL TRAIN—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STEAMER FOR DETROIT; at Forest with Pittsburgh, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at Delaware with the C., C. and C. Road, for Cleveland and points East. Also connects with Junction Railroad at Hamilton for Oxford.

4:30 P. M. TRAIN—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburgh, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Also, connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago. Also connects with Junction Railroad at Hamilton for Oxford.

6 P. M. TRAIN—For Dayton, Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 8 A. M.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; at the new Ticket Office on West side of Vine street, between the Post Office and the Burnet House; or at the Sixth Street Depot. D. McLARDON, Superintendent.

FREEDOM IRON COMPANY,

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods,

Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Milford Co., Penn.

JOHN A. WRIGHT, Sup't.

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works. June 9.

New Time Table

OF THE

NEW YORK CENTRAL R. R.



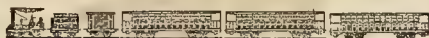
Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp. 7:00 A. M.	7:00 P. M.	7:00 P. M.
Mail 9:00 A. M.	12:50 A. M.	
New York Exp. 11:15 A. M.	9:10 P. M.	9:00 P. M.
Night Exp. 5:00 P. M.	4:00 A. M.	4:00 A. M.
Utica Accom. 6:00 P. M.	Ar. U. 10:00 P. M.	
N. Y. Mail 11:15 P. M.	10:00 A. M.	10:00 A. M.
Leave Buffalo.	Leave Bridge.	Ar. Alb'y.
New York Exp. 5:15 A. M.	5:15 A. M.	3:30 P. M.
Steamboat Exp. 8:00 A. M.	8:00 A. M.	8:00 P. M.
Mail 11:00 A. M.		2:30 P. M.
Cleveland Exp. 6:00 P. M.	6:00 P. M.	4:40 A. M.
Cincinnati Exp. 11:00 P. M.	11:00 P. M.	8:30 A. M.
Utica Accom. 11:00 P. M.		10:00 A. M.

Commencing April 11, 1859.

LITTLE MIAMI

AND—

COLUMBUS AND XENIA



RAILROAD.

FOUR TRAINS DAILY.

Three Through Express Trains.

FIRST TRAIN—No. 1 Express, at 6 A. M., connects via Columbus and Cleveland; via Columbus, Crestline, and Pittsburg; Detroit via Cleveland and Steamers. This train stops between Cincinnati and Columbus, at Loveland, Deerfield, Morrow, Xenia, Cedarville, South Charleston, London, and West Jefferson.

SECOND TRAIN—No. 2 Express, at 8:30 A. M., connects via Columbus, Bellair, and Benwood; Wheeling, via Columbus, Steubenville, and Pittsburg; via Columbus, Crestline, and Pittsburg; via Columbus and Cleveland; Detroit, via Cleveland and Steamer; Springfield. This train stops between Cincinnati and Columbus at Plainville, Milford, Loveland, Morrow, Spring Valley, Xenia and London.

THIRD TRAIN—Accommodation, at 4:40 P. M., for Columbus and Springfield.

FOURTH TRAIN—Night Express, at 11:30 P. M.; connects via Columbus, Bellair, and Benwood; Wheeling; via Columbus, Steubenville and Pittsburg; via Columbus, Crestline and Pittsburg; via Columbus and Cleveland. This train stops at Loveland, Morrow, Corwin, Xenia and London. Sleeping Cars on this Train.

No. 1 Express through to Cleveland without change.

The Night Express Train, leaving Cincinnati at 11:30 P. M., runs daily, except Saturdays. The other trains run daily, except Sundays.

For all information and Through Tickets to Boston, New York, Philadelphia, Baltimore, Washington, Buffalo, Niagara Falls, Dunkirk, Cleveland, Pittsburg, Wheeling, and all Eastern places, please apply at the offices, Walnut Street House, No. 1 Burnet House, south-east corner of Broadway and Front Streets, and at the Eastern Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Superintendent.

Omnibuses call for passengers by leaving directions at the Ticket Office.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the West, South-West and North-West.

Fare to New York and Boston ONE DOLLAR less than via any other route.

TWO TRAINS

Leave Wheeling daily at 8:05 P. M., and 11:30 A. M. Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City. Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2. Quick time and sure connections.

Inquire for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

E. F. FULLER,

General Western Agent.

L. M. COLE,

General Ticket Agent.

W. P. SMITH, Master Transportation.

WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

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119 Walnut st., Odd Fellows' Building

CHICAGO,
Great Western and North-Western
ROUTE.INDIANAPOLIS & CINCINNATI
SHORT LINE

RAILROAD.

(VIA LAWRENCEBURG.)

Distance 110 Miles and No Change of Cars Between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS LEAVE CINCINNATI daily, (Sundays excepted,) from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6 A. M.—Chicago and Terre Haute Day Express—Through to Terre Haute, Lafayette, and Chicago, with but one change of cars.

SECOND TRAIN, 4:15 P. M.—Accommodation—The 4:15 P. M. train arrives in Indianapolis at 10:10 P. M.

THIRD TRAIN—Chicago and Terre Haute Night Express—8 P. M.—Arrives at Indianapolis at 1 A. M. This train runs through from Cincinnati to Chicago, with but one change of cars.

The above trains make close connections at

Indianapolis, Lafayette and Chicago,

WITH TRAINS FOR

Terre Haute,	Lafayette,
Springfield,	Jacksonville,
Rock Island,	Danville,
Galesburg,	Burlington,
Keosau,	Milwaukee,
Mattoon,	Pana,
Naples,	Peoria,
Galena,	Dunleith,
Quincy,	Racine,
Prairie du Chien,	Decatur,
Bloomington,	Joliet,
Lasalle,	St. Paul,

And all towns and cities in the North-west.

Connections are also made at Indianapolis with the Peru and Indianapolis Railroad for Kokomo, Peru, Logansport, Fort Wayne, Toledo and Detroit.

Be sure you are in the right Ticket Office before you purchase your ticket, and ask for tickets

Via Lawrenceburg & Indianapolis.

THROUGH TICKETS,

Good until used, may be had at the Company's Offices, north-west corner Broadway and Front Streets, under Spencer House.

A. HAMILTON, Ticket Agent.
No. 1 Burnet House, north-west corner Third and Vine Streets.

WM. M. STARK, Ticket Agent.

Also at the Walnut Street House.

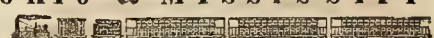
J. S. SHACKELFORD, Ticket Agent.
And at the Depot, where all necessary information can be had.

H. C. LORD, President.

W. H. L. NOBLE, General Ticket Agent.

Commencing May 22, 1859.

OHIO & MISSISSIPPI



RAILROAD.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCENNES, Cairo, and St. Louis; at 9:00 A. M., and 8:30 P. M.

Three Daily Trains for Louisville, at 9:00 A. M., 2:00 P. M., and 8:30 P. M.

One Train for Evansville at 8:30 P. M.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 8:30 P. M.

RETURNING—Fast Line—Leaves East St. Louis, (Sundays excepted) at 6:50 A. M., arriving at Cincinnati at 10:10 P. M.

EXPRESS TRAIN—Leaves East St. Louis daily at 2:40 P. M. arriving at Cincinnati at 6:48 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the offices Walnut Street House, bet. Sixth and Seventh Streets, No. 1 Burnet House, corner office; north-west corner of Front and Broadway; Spencer House Office; and at the Depot, corner of Front and Mill Streets.

W. H. CLEMENT, General Superintendent.
Omnibuses call for Passengers

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

SOLE IMPORTERS
PROSSER'S PATENT SURFACE CON-
DENSERS for high pressure steam, with sea or
other bad boiler water, gauges, 3 cutter drills, counter-
sinks, tube end cutting bars, expanders, tube scalers,
steel wire and whalebone brushes, pull lever wrenches,
tubes—plain or enameled, screwed together for Artesian
Wells, HOLLOW SLABS for various purposes. Steel for
Rollers.
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27 Jan. 28 Platt Street, New York.

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BUSH & LOBDELL, Wilmington - - - - - Delaware

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AND
TIRES,
For R. R. Cars & Locomotive Engines,
ARE PREPARED TO

Execute Promptly Orders to any Extent
FOR THEIR

CELEBRATED WHEELS,
EITHER SINGLE OR DOUBLE PLATE,
WITH OR WITHOUT AXLES.

WHEELS FITTED
To Hammered or Rolled Axles,
In the best manner, at the shortest notice, and on the
Most Reasonable Terms.

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A Book for Every Business Man! JUST PUBLISHED

—THE—

POST-OFFICE GUIDE! For Post-Masters and Business Men.

CONTAINING

A Complete List of Post-Offices in the United States
and Territories, arranged by States and Counties; A
Complete List of all Distributing Post-Offices; Rates
of Foreign and Domestic Letter Postage; Rates of
Printed Matter, Transient and Regular; Abstract
of the Laws and Regulations of the Post-Office De-
partment, &c., &c.

COMPILED BY E. PENROSE JONES,
Late Assistant Post-Master at Cincinnati.

Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.

U. S. BLANK AGENCY, CINCINNATI POST-OFFICE, }
January, 1859.

This work has been carefully compiled and corrected by
E. PENROSE JONES, Esq., late Assistant Post-Master of the
Cincinnati P. O., from the Records in this Department, and
other sources, and contains the most complete list of Post-
Offices especially of the Western, North-Western, and
South-Western States, yet published.

MAHLON H. MEDARY,

Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an octavo pamphlet of about 100 pages.
The entire matter is kept standing in type, and as the com-
piler is promptly advised of all New Offices, Changes and
Regulations of the Department, the information is corrected
up to the last day of publication, an advantage possessed
by no other work of the kind.

Observe. That this list is arranged by States and Coun-
ties, making it especially valuable to business men. No
similar arrangement has been published since 1856. There
are 3000 more offices in this than in any book heretofore
issued. The Price is one-half that of any work of the kind
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address, upon receiving Twenty-five Cents in Silver or
Postage Stamps. Five Copies sent for \$1.00, or Twelve
Copies for \$2.00.

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194 Walnut Street,
Cincinnati, Ohio.

Mar 10. 59.

WHEELER & WILSON'S



SEWING MACHINES.

W. M. SUMNER & CO., cor. Fourth and Wal-
nut Streets, second floor, Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky., Columbus, O.,
Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with
important improvements, at a reduction on former prices;
and to meet the demand for a GOOD, LOW-PRICED FAMILY
MACHINE, have introduced a *new style*, working upon the
same principle, and making the same stitch, though not so
highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALIKE ON
BOTH SIDES, impossible to ravel, and leaving no chain or
ridge on the under side, the economy of thread, and adapt-
ability to the thickest or thinnest fabrics, have rendered this
the most successful and popular Family Sewing Machine
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At our various offices we sell at New York prices, and
give instructions, free of charge, to enable purchasers to
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years.

Send or call for a circular, containing all particu-
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WM. SUMNER & CO.

1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th
low by Corby, Gossin & Co.'s make, for sale very
TRABER & AUBERY,
7 Public Landing

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP AND Compound Steam Pumping Engine,



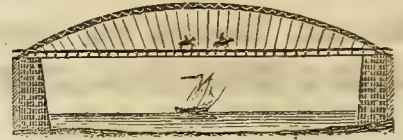
WOULD respectfully invite
the attention of RAILROAD
Companies, Manufacturer
Distillers, Miners, and the pub-
lic generally to these Pumps
as the best Pump now in use
and acknowledged by all who
have used them to be perfect—
are simple in their construc-
tion, compact, durable and not
likely to get out of order; well
adapted for Steamboats, Rail-
road Water Stations, Distille-
ries, Breweries, Furnaces,
Mines, Rolling Mills, Paper
Mills, Factories, Wells, Cis-
terns, Stationary Fire Engines, Garden Engines and for
all purposes where a Pump can be used. Also, for forc-
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rapidly.

Also, McGowan's Patent Ball Valve Pump, designed
for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings
Lead, Copper and Gas Pipe furnished at their west mar-
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Full and perfect satisfaction guaranteed in all cases,
when properly put up according to directions.
Orders thankfully received and promptly filled at the
shortest notice.

SILVER MEDAL. (The highest prize) awarded
for the Compound Steam Pumping Engine at the late Fa-
Ohio Mechanics' Institute. June 18, 1855—17

MOSELEY'S TUBULAR WROUGHT IRON



ARCH BRIDGES AND ROOFS.

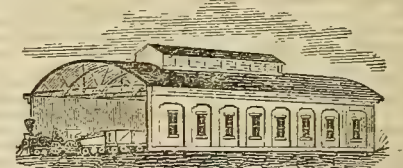
THESE BRIDGES AND ROOFS HAVE
now been fully tested in this vicinity, and it is
universally conceded that they can not be excelled.
The Roofs, are wholly of Wrought Iron, or mixture of
Wood and Iron; Sheet piling always Iron.

The bridges are wholly Wrought Iron except the floor,
which is wood, like the floors of ordinary Bridges.
We are prepared to make these structures in any
quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per
foot lineal.
Common Road or Turnpike, 50 feet span, 2600 lbs.
\$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100
square feet, part wood and part iron, from \$12 to \$20
per square.

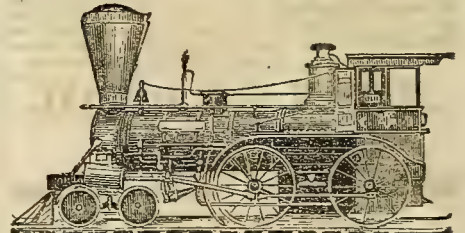
Increase of span of bridges, or width of buildings
makes an increase of price, but the increase in price is
no more than the increase of wooden structures.



We can furnish iron of every size to work into
Bridges and Roofs, and Railroads or other companies
buying the right to use them and the iron of us, can
make their own structures, one third less than the
above prices. Our structures weigh only from 1-4 to
1-10 that of wood; difference in freight in a long dis-
tance buys our work. In a few days we will have at
our factory, 497 West Third Street, in this city, four
different specimens of our Roofs, where the public can
inspect them to their satisfaction. We beg them to
give us a call, as all our work is warranted, and we ask
no pay on ordinary jobs until the work is done and ap-
proved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O.
may 13. MOSELEY & CO.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotives
equal in efficiency and durability to the best Eastern
manufacture. Also, Shaping and Slotting Machines
suitable for railroad shops. Also, all kinds of heavy
forging and casting done at short notice. Also, bolts for
bridges cut with dispatch.
ap. 20 MOORE & RICHARDSON.

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State, is under the superintendence of **Col. F. W. MORGAN**, a distinguished graduate of West Point,
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Geology; also in English Literature, Historical Read-
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time means, and object of Professional preparation, both
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Address the Superintendent, at "Military Institute,
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P. DUDLEY,

President of the Board.

Jan 5th.

The Railroad Record.

E. D. MANSFIELD, }
T. WRIGHTSON, } Editors.

CINCINNATI:

Thursday Morning, Aug. 4. 1859.

THE RAILROAD RECORD,

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THE European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

LITTLE MIAMI RAILROAD.—The earnings of the Little Miami and Columbus and Xenia Railroads, for July, are as follows, compared with the business of July, 1858:

July, 1859.....	\$90,871 93
“ 1858.....	85,524 59
Increase.....	\$5,347 34

CINCINNATI, HAMILTON AND DAYTON R. R.—The business of the Cin., Ham. and Dayton Road for July, foots as follows:

July, 1859.....	\$41,241 60
“ 1858.....	35,161 15
Increase, 1859.....	\$6,080 45

The business arising from the Fort Wayne connection at Lima is upon the increase, and the Dayton and Michigan Road, now about ready to be opened to Toledo, will be a valuable feeder to this line.

The earnings of the Michigan Southern Railroad for the six months ending 30 of June, 1859, were in round numbers as follows:

Gross Earnings.....	\$777,000
Working Expenses.....	552,000
Net profit.....	\$225,000

The gross earnings from August to December, 1856, inclusive, were over.....\$1,250,000
Expenses at \$100,000 a month.....500,000

Profit.....	\$750,000
July, as above.....	25,000
January and June, as above.....	225,000

Total net earnings.....\$1,000,000

This would leave \$250,000 after paying all the interest of the funded and floating debt.

MONEY—INTEREST AND NOTES.

These are, undoubtedly, interesting subjects, and practically they come under our observation every day. Practically, too, there are problems connected with money and currency which remain unsolved to this day. There is one, the greatest of all, the one which lies at the root of all, viz: how much currency—how much *money of circulation* does society, in a given condition, require? No real solution has been given to this question; but, Europe and the United States are in a condition now, as regards civilization, standards and statistics, to furnish some approximation to the true answer. It is evident that the elements of the problem must be nearly fixed, before we can approach the answer.

1. We must have a *standard measure* of coin and currency—a *unit* of money; and that we very nearly have, for the units in America and Europe are nearly the same, as shown by the slight difference of Exchange. 2. There must be nearly the same progress, or movement, in business and the arts; for, it is quite obvious, that if, in one state of society, business is much more active and the arts more progressive than in another, there will be required more money of circulation; but, in the main, there is no great difference, in these respects, between Europe and America. All European and American civilization is now progressive. The United States are, no doubt, the theater of greater commercial movements and active business, than most of Europe, but, perhaps, not in all things. Great Britain, France, Germany and Russia are all, at this time, progressive countries, and, no doubt, require more money from generation to generation. But, on the whole, there is no essential difference in business activities. 3. Another element must be fixed; the different kinds of currency must be convertible at par, and this is the case at the present time. We have, then, at the present time, a condition of things which admits of an approximate solution of this problem.

The first question which meets us is,—“*is there any fixed quantity of money required?*” We reply there is, and we deduce the principle from the *experience* of the American States, which we think decisive. When the *nominal currency* became too great, as in the case of continental money, it rapidly depreciated, till it compelled a redemption or sank to nothing; i. e., a quantity of circulation too great (estimated by the *unit* of value,) will inevitably result in one of two things. The excess will seek redemption and be taken up, or it will depreciate just in proportion to its excess. This has been the experience of every State in the Union, and of the United States together; and the experience is just the same, when every note is redeemable in gold, as when not redeemable. Every commercial crisis has been attended by a rapid curtailment of currency; because, in such cases, business ceases,

and money is not needed, except for matters of necessity. But, suppose that society has *not* enough; will it seek more, and obtain it? Unquestionably. In such a case as that, we have the experience of the western States, to show that neither constitutions, laws, nor opinions will restrain society from procuring currency—money of circulation. Take, for example, Illinois, which, but a few years since, put a clause in the constitution forbidding banks, and which had not a bank note of her own. All these laws were repealed, and Illinois has a large number of banks, and six millions in paper currency. Take Kentucky, for another case. Kentucky, a comparatively inactive State, needed but little money; but, finding Ohio and Indiana deficient, immediately began the manufacture of bank notes, and has largely supplied those States. The western States have now a paper circulation of twenty millions more than they had half dozen years ago. This they got, because it was needed, and it may be laid down as a principle, in the present state of society, that when money is deficient it will soon be obtained. Society will meet the commercial demand by the creation of a currency. What then is an average supply of currency? We think the experience of France, Great Britain, and the United States furnishes a tolerably correct answer to the questions; at least, in regard to paper money. For the last ten years, these countries have, in all their fluctuations, maintained an amount of money in circulation not so greatly variable but what we can establish something like a general average.

In the *Record*, for September, 1857, we gave a carefully prepared estimate, based on official returns of the amount of money of circulation in the United States, and found it to be \$362,000,000, or, in the proportion to population, of 13 to 1. Since then there has been some fluctuation, but the proportion now existent (August 1, 1859,) is not materially different. The population of the country is very near 30,000,000, and the amount of active circulating money about 13 to 1.

The operations of the Bank of England afford the best test of the wants of society in regard to money, as commerce and civilization advances. We give the following *average* circulation of the Bank of England of successive *periods* of 20 years each, viz:

1698 to 1718.....	\$5,000,000
1718 to 1738.....	15,000,000
1738 to 1758.....	20,000,000
1758 to 1778.....	30,000,000
1778 to 1798.....	48,000,000
1798 to 1818.....	100,000,000
In 1818 maximum.....	150,000,000
1818 to 1838.....	105,000,000
In 1839.....	110,000,000

There is no doubt that the activity of commerce has increased in nearly the ratio here indicated. Combine this increase with the increase of population, and we shall have almost exactly the ratio corresponding with the increase of Bank of England notes. The Banks of Ireland, Scotland, and the Provinces, give a bank note circulation, in addition to the above, of about \$60,000,000. Thus, the bank

note circulation of Great Britain comes up to about \$170,000,000 at the present time; not much, if any, less than that of the U. States. The coin kept on hand by the banks of Great Britain does not exceed one half, or \$85,000,000. The coin in circulation among the people, (in consequence of there being no bank notes under \$5.00,) is undoubtedly greater than it is in this country. Coin is much more in common use among the people. Still, when we consider that the money used for families, in daily transactions, is not very great in amount, we shall find that the excess of coin current among the British people, over that in America, must be small. Looking to the recent increase of gold in the United States, we very much doubt whether there is as much actual coin and bullion in Great Britain as in this country. At any rate it can be little. In September, 1857, (*vide* the Record,) we ascertained that the coin in the United States was \$200,000,000. Since then it has increased but little, and if we put all the coin of circulation in Great Britain at \$250,000,000, we shall not be far out of the way, and thus, we have \$420,000,000 as the money of circulation in Great Britain. Taking the population at 28,000,000, we have a proportion of 15 to 1. This is larger than that of the United States, but not so much so as would be generally estimated.

Bank notes in France are furnished almost entirely by the Bank of France. We have not now the means of ascertaining the precise amount of money in circulation in France.—But recent returns, and the state of commerce in France, prove that money is not more abundant in France than in Great Britain, probably not so much so; France, on the whole, is a commercial country, not given to much speculation, and not as active trade as the United States or Great Britain. We should place the money of circulation there, at a less proportion.

In Germany, comprising 50,000,000 of people, there is, at present, \$200,000,000 in bank notes, and the proportion of coin is greater than in the United States. But even then the coin can not exceed \$400,000,000, so that \$600,000,000 would be the extent of its circulation, or 12 to 1.

Assuming, then, these general data in this country and Great Britain very nearly accurate, we have this general table:

	Population.	Money.	Proportion.
United States.....	30,000,000	\$390,000,000	13 to 1
G. Britain.....	28,000,000	420,000,000	15 to 1
France.....	36,000,000	432,000,000	21 to 1
Germany.....	50,000,000	600,000,000	12 to 1
Aggregate.....	144,000,000	\$1,842,000,000	12½ to 1

We find, (if our estimate is generally correct,) that the most civilized and commercial nations do not vary a great deal in proportion of current money which they employ; and as this is a period of commercial activity, without any great disturbing causes, with a continually increasing population and general prosperity, we may assume reasonably that this general average is nearly the full amount

which is needed by society, for its ordinary purposes. Taking the above facts as a basis, we derive the following general inferences, which, if true, are of commercial value:

1. Society will not retain and hold a much larger amount of current money than it needs. This is proved (for example) by the returns of the Bank of England, which show that its notes steadily increased for near a century, when, having rapidly advanced, in 1818, to \$150,000,000, (much more than was needed,) the people returned them, and the bank was never able to keep out that amount again.—The same was proved in the United States, in 1836-'7, and in 1857.

2. It is proved by the operations of the large banks and the coinage, that, in the present state of civilization and commerce, a proportion of money is required for the people, not far from 12 to 1, of the population. 10 to 1 may be taken as the minimum, and 16 to 1 as a maximum of the proportion of money which society now demands and will absorb.

3. Of the whole proportion of money of circulation, at least one-half, and probably more, must be in coin. The coin of Great Britain and the United States, speculative and commercial nations, is now more than equal to the paper.

4. It follows from this also, (I refer to the rate of interest,) interest is, in a great measure, a test of the quantity of money in circulation. According to all the facts we have stated, money is now abundant, and the rate of interest ought to be low, and accordingly we find it actually is. We hear of 30 per cent. at St. Paul, and 10 per cent. in Cincinnati, &c., but this is not the true test of interest. This is determined by the rates at which large amounts are moved. This being the standard, we have the following rates of interest established in Europe and America:

In London.....	2½ per cent.
"Hamburg.....	2½ "
"Berlin.....	5 "
"Bremen.....	6 "
"Antwerp.....	4 "
"Amsterdam.....	4 "
"Leipsic.....	6 "
"Vienna.....	5 "
"Paris.....	4 "
"New York.....	6 "

In the great depositories of money, interest is not more than 4 per cent., and the Government of the United States gets money at 5 per cent. In fact, then, the existing rates of interest prove that money is actually abundant, and the influx of gold producing its legitimate effect.

COVINGTON AND LEXINGTON R. R.—The suit brought against the Covington and Lexington Railroad Co., by the holders of its superior securities, was commenced in the Courts at Lexington yesterday. The case will be continued until disposed of by this Court.

A new iron car, recently patented by Mr. Russell, a Director in the Pittsburgh, Fort Wayne and Chicago Road, promises to justify the hopes that have been entertained of its economy.

[For the Railroad Record.]

OBSERVATIONS ON THE DANGERS AND DEFENSES OF THE MARITIME CITIES OF THE U. S.

We continue our extracts from Major Barnard. Speaking of the Russian defenses of Cronstadt, he says: "This port and military and naval depot, was defended (in its main approach) by upwards of 600 hundred guns,* 500 of which were mounted in five 'masonry case-mated' works; the remainder in an open barbette battery, which enfiladed the main channel. This number is formidable in itself; yet the same number mounted in New York harbor would not afford any thing like such a formidable defense as was found at Cronstadt, owing to its great area and long line of approach compared with the latter."

"These works fulfilled their object. They protected the great port and depot of Cronstadt and the capital of the empire from invasion. For two successive years did the mighty armaments of France and England threaten; but they were over-awed by the frowning array of the 'case-mated castles' which presented itself, and declined the contest."

"Let us turn our eyes now to the great naval depot of France. After the almost incredible expenditures lavished here, in creating a harbor facing the shores of her great rival, England, and an equally profuse expenditure in providing all that constitutes a great naval depot; we may suppose that the best means, without regard to cost, which the science of war could devise, would be employed here, to make this great seat of naval power secure against the formidable means of attack possessed by the great maritime power most likely to be the assailant. The means there employed are (so far as regards mere harbor defense) precisely the same, (viz. case-mated works in several tiers, combined with open batteries, where the locations are favorable); and the application of means is the same as we have found successful in Russia—the same which constitutes this system of harbor defense of New York."

Lieut. Morton proposes material innovations, in fact, rather revolution, the extensive employment of barbette batteries, and sea fronts of from 550 to 750 yards. Our present usual front of a single work is 380 yards. Lieut. Morton's spaces appear to me exorbitantly extended. The expense of barbette batteries which he would use on a larger scale, is, it is true, much less than that of case-mated works, but the relative efficiency of the latter, as proved in numerous instances, more than compensates for this. In the siege of Gibraltar, by France and Spain, in 1782, it was principally by case-mated works that the double attack, both by land and sea, was effectually repulsed.

* Besides 120 guns on two ships of war, stationed so as to rake the approach.

† Cherbourg.

There are two other topics adverted to by Major Barnard, that are of the greatest interest. I have often thought that familiarity with the rifle and skill in the use of it are of much more importance in war than has been commonly supposed. It is obvious also by recent experiments and by the effective use of rifled cannon in the late very brilliant campaign of the French Emperor in Italy, that the rifled musket and rifled cannon are weapons of the most formidable power. Our Revolutionary War and the War of 1812, showed the extreme efficiency of the rifle in practiced hands. Saratoga, New Orleans, Buena Vista, all attested its tremendous effect. The rifled cannon used in the late Italian campaign decided the day at Magenta and Solferino. The progressive influence of modern inventive genius, is most signally displayed by the recent effects, in trained hands, both of the *minnie* rifle and of the rifled cannon. Had these last been in existence at Waterloo, the famous charge of the Scotch Greys, which caused in Wellington such exultation, would have been as complete a defeat as it was a victory. They would have been mowed down long before they reached the French lines, as the Austrian cavalry were, when in such great numbers, they attempted to charge at Solferino.

The consequences of the usual want of familiarity and skill in the use of all descriptions of fire-arms, are vividly depicted by Major Barnard. He says:

"The result is a prodigious smoke, and a prodigious throwing away of balls, and very little damage done. This has been, however, by no means a *peculiarity* of coast defense. The same system of random firing has hitherto prevailed both in the use of small arms on land, and heavy ordnance in sea battles. * * But it is at last discovered that it is of more importance to teach the soldier to direct his piece with accuracy of aim, than to perform certain motions on parade with the precision of an automaton. The same idea is now infused into all the departments of military and naval science, and is a necessary result of the recent great improvements in fire arms. In fact, the truth has at last become apparent that the old fashioned system of random firing, though, perhaps, like the charge of the six hundred at Balaklava, *vien magnifique, n'est pas le guerre.*"

"It is of the utmost importance that we should apply this principle to the management of our sea-coast batteries, and give it a practical effect."*

Certainly. But Congress must be effectually aroused from its negative condition with respect to the real exigencies of the military services, in order that an effectual remedy may be supplied. If they do not act with considerate vigor in this behalf, corresponding to the improvements practiced as well as

scientific developing in Europe, some of our fluent speakers whose patriotism is estimated by many according to their verbosity and their pennywise economy, will wake up some day and find one or two of our important seaports in the hands of a formidable foreign foe.

We may be sure of this, that if war occurs between us and one of the great maritime nations of Europe, its near approach will be known weeks before any declaration. Those weeks might be diligently used by an enemy to send a formidable fleet, with a powerful land force, whilst it would require months to train the artillery-men of a fort, freshly brought within its enclosure, whether enlisted or volunteers. The men may be there, in such an emergency, in sufficient numbers, but the familiarity and skill in the use of cannon will be wanting, under our present paucity of numbers in the rank and file of the artillery—for their qualifications can not be *improved*.

The use of rifled cannon, the use of cannon of heavy calibre, the proportionate numbers of each description of cannon, will be considered in our next number.

ERRATA.—There are only two or three typographical errors in my essay in the *Record* of July 28. "An" is left out before "antiquated." "Barbeite" is put for "barbette," and "in land batteries" was put "inland batteries."

LOUISVILLE AND NASHVILLE RAILROAD—IRON RAILROAD BRIDGE.

The *Louisville Courier*, of July 14, gives an account of an excursion over the Louisville and Nashville Railroad, on the 13th of July, from Louisville to and across Green river, to the present terminus of the track:

"The main road is now being run over by daily trains of cars from Louisville across Green river at Munfordsville, a distance of 74 miles. At the Nashville end the cars are running over the whole distance, of 71 miles, between Bowling Green and Nashville, except nine miles; which are now ready for the iron. There are, therefore, 136 miles of the main road, over which the cars are now running, which leaves only forty-eight miles yet to be completed. On these 48 miles, much the greater part of the work is done, and the cars will run over the whole line, from Louisville to Nashville, before the first day of January next.

HISTORY OF THE COMPANY.—The Louisville and Nashville Railroad Company was chartered by the Kentucky Legislature, March 5th, 1850. Its capital stock was fixed by the act of incorporation at \$3,000,000, with the privilege of an increase to \$4,000,000. On the 17th of June of the same year, the City Council of Louisville subscribed for \$1,000,000 of the stock, which was ratified by a vote of the people August 23d. On the 4th of September following, the stock books of the company were opened, and \$100,000 having been subscribed, a meeting of the stockholders was held September 27th, and seven directors elected. These directors chose L. L. Shreve first President of the corporation.

L. L. SHREVE'S ADMINISTRATION.—Mr. Shreve acted as President of the company from September, 1850, to October, 1854. In

June, 1851, the City Council made an appropriation of \$4,000 toward surveys for the route of the road, and authorized the employment of L. L. Robinson as engineer. Under this act of the council, Mr. Robinson began the survey at the junction of Broadway and Seventh streets, in August, 1851. On the 8th of December, 1852, the first division of the road was located by resolution of the Board of Directors. On the 13th of April the company contracted with Morton, Seymour & Co., to build the whole road in two and one half years, and the work of construction was begun the first Monday in May of the same year.

On the 1st of October, 1852, Mr. Shreve made his first annual report to the stockholders. At that time the stock subscriptions of the company amounted to \$1,600,000, and the expenditures to \$24,598 52. On the 1st of October, 1853, he made his second report, showing a stock subscription of \$3,328,700, while the receipts of the company had been \$146,502 70, and its expenditures \$115,861 85. His annual report, June 19th, 1854, at a called meeting of the stockholders, showed the receipts of the company to that date to have been \$1,313,394 43, and its disbursements \$817,179 46.

GOV. HELM'S ADMINISTRATION.—The Hon. John L. Helm was elected President, as successor to Mr. Shreve, October, 1854, and he still holds that position. When his first annual report was made, October 1st, 1855, the receipts of the company had been \$1,559,562 34, and its expenditures \$921,840 23. The total stock subscriptions were estimated at \$4,034,550, May 30th, 1855. His second annual report, October 1st, 1856, showed the expenditures of the company to be \$1,467,260 26, and its total available assets were estimated at \$2,422,735 12. These assets included the second million subscribed by Louisville, which, if added to previous stock subscriptions, would make a total of \$5,034,550. His third report, October 1st, 1857, showed total expenditures \$2,589,150 19, and assets \$1,704,402 08. And his fourth and last report, October 1st, 1858, showed total expenditures \$3,834,970 07, and remaining assets \$661,714 51.

MR. GUTHRIE'S ADMINISTRATION.—In the spring of 1857, the Hon. James Guthrie left the Treasury Department of the Federal Government and came home. He was at once made Vice President of the company, and though nominally occupying the subordinate position, he has really been the head and front of the enterprise. The health of Gov. Helm was bad, and physical inability rendered it impossible for him to lead the enterprise.—The Vice President has, therefore, been the real President, and the progress of the road since March, 1857, in spite of difficulties insuperable to almost any financial head, has shown the skill and might of Mr. Guthrie.

It will be seen, by reference to the estimates, that, from the act of incorporation in March, 1850, to March, 1857, a period of seven years, or from the beginning of the work of construction in May, 1852, a period of five years, the company only expended about \$1,500,000, in constructing a road that was to cost \$7,000,000. This mode of building railroads did not suit Mr. Guthrie's go-ahead notions. He went to work, and in spite of the terrible financial crisis of 1857 and 1858, he managed to swell the expenditures to \$2,289,150 19 by October, 1857, and to \$3,384,980 07, by October, 1858. His theory was to spend as much money as he could judiciously use in rushing the road to completion, instead of letting it drag along at a snail's gallop, until interest and the salaries

* Major Barnard's Essay, p. 53.

of officers eat up the assets. He had pushed his theory right with his wonted inflexible and untiring perseverance, using the credit of all the friends he could enlist to raise money, and finally bonding the company and mortgaging the road to the amount of \$2,000,000. He has sold nearly a million and a quarter of these bonds right here, at home, and raised money enough to make the early completion of the entire road a fixed fact.

IRON BRIDGE ACROSS GREEN RIVER.—The most attractive object upon the road is the graceful iron bridge that spans Green river.

This bridge is 984 feet long, from abutment to abutment, and 115 feet high above the low water mark. It is divided into five spans, the two spans at the extremes being 180 feet long, and the three intervening 208 feet each from center to center of piers. The superstructure is entirely of cast iron, composed of two chords and joists, supported by stone piers, and suspended between them by wrought iron suspensions. The system of suspension is under the bridge, and composed of different sizes of iron. The main suspension, going from pier to pier, is composed of bars 4 inches by 1½ inches. The second suspension, going from each pier to the center post, is composed of bars 4½ inches by 1 inch. The third suspension, going from the center post to half way from the pier and then to the pier, is composed of bars 2 inches by ¾ inch; and the fourth suspension is composed of bars 2 inches by ¾ inch. Above the superstructure the floor beams are fixed to receive the cross-ties and rails. On each side of this track is a small side walk. This beautiful and substantial bridge was designed by Albert Fink, Esq., and made by Inman & Gault, of this city. It is like the bridge over the Monongahela, over which the trains of the Baltimore and Ohio road run daily at the rate of 40 miles per hour. With the exception of the Victoria bridge at Montreal, it is the longest structure of the kind in America, and we hesitate not to say that it will compare favorably with anything of the kind in the world, for beauty and durability. The cars have gone over it a number of times, and its strength has been fully tested by heavy locomotives moving at a rapid rate.

PENSACOLA AND GEORGIA RAILROAD COMPANY.

The stockholders of the Pensacola and Georgia Railroad Company met in this city on Wednesday last, and adjourned on Thursday afternoon. Want of time prevents us from giving the proceedings in detail.

The report of the President, Col. Houston, was satisfactory, and showed that the earnings of the road, on the 25 miles now in operation, are quite equal to any reasonable expectation, considering how short a time has elapsed since the opening of this portion of the line. The gross receipts for the last twelve months were about \$19,000, some \$6,000 of which was from passengers, and the net earnings about \$7,000. The expenses were increased by unusual repairs, rendered necessary by the heavy rains last fall and the present spring. Damages are always greater from this cause in new roads than on those which have been longer in operation.

The report of the Chief Engineer, Mr. Randolph, was also an interesting document. We will endeavor to lay it before our readers in our next, with such other papers as may be handed to us.

A committee of the Directors, appointed to

visit St. George's Sound, and to examine the various points suggested as proper termini of a road to the Sound on Appalachicola Bay, made a report, accompanied with several valuable official papers and maps, giving useful information. The report was referred to a select committee, who reported, through their chairman, Mr. G. K. Walker, the following resolution, which was adopted:

Resolved, That the stockholders regard with favor the immediate construction of the branch road to the Gulf of Mexico, in the county of Franklin, provided for by an act of the last Legislature, and that the Directors of this company are instructed to open books of subscription for such amount of stock in said road as they shall deem proper, and put said road under contract so soon as the same can be done consistently with the true interest of this company, and the duties and obligations devolving on it as a stockholder in the Tallahassee Railroad Company.

Another interesting subject considered was the extension of the road from Quincy toward Pensacola. The following resolutions on this subject, were offered by Mr. C. E. Cabell, which, after some discussion, were unanimously adopted:

1. *Resolved*, That it has been the earnest desire of the Pensacola and Georgia Railroad Company, from the first period of its organization, to construct a railroad through West Florida as well as through Middle Florida, and to ensure a connection, *on Florida soil*, between the Atlantic Ocean and the waters of the Bay of Pensacola. That the operations of this company were commenced in Middle Florida, and have, thus far, been confined to Middle and East Florida, because no subscriptions have been made in the western part of the State.

2. *Resolved*, That while this company has not doubted its ability ultimately to build this part of its road, and is determined on its construction, we have expected the co-operation of our friends in the West, and we have received, with great satisfaction, the assurance that our fellow citizens in West Florida are aroused to the importance of securing to themselves the benefits of our railroad through that section of the State, and are resolved to give their time, energies and money, to ensure the completion of a work of such vast social, commercial and political importance to our entire State.

3. *Resolved*, That we are, and have been, at all times, willing that the people of the West should construct the road through their territory under a separate and distinct organization, if they desire to do so, and, with this view, we procured an amendment to our charter and have invited them to form an organization for this purpose, and have declared our willingness to make an assignment of our charter to build that portion of our line in accordance with the provisions of the amended charter of this company, approved 15th of December, 1855, and in accordance with the provisions and spirit of the Internal Improvement of this State, approved January, 1855.

4. *Resolved*, That we have not the legal right to make an assignment of our charter for building any portion of the line of our road, except in accordance with the provisions and restrictions of the act of the Legislature, amending our charter, and which authorize the company to make an assignment "of any portion or portions of their main line or extensions to any persons or properly organized company desirous of constructing the same, on their making a bona fide subscription of stock, bearing a due proportion to the section

of road so undertaken to be constructed by them." and on giving two months notice to the Trustees of the Internal Improvement Fund.

5. *Resolved*, That to facilitate the construction of the road from Quincy to Pensacola, and to commence operations without delay, we recommend the parties most immediately interested to proceed to secure subscriptions to the capital stock of the Pensacola and Georgia R. R. Co., on the condition that the subscriptions so made shall be applied exclusively to the building of the portion of the line of road West of the town of Quincy, and on such other conditions as they may select. This company will consider such subscriptions sacred, and hereby promise and bind themselves to use and apply such subscriptions only in accordance with the conditions imposed by the subscribers.

6. *Resolved*, That this company will receive subscriptions, to be applied to the construction of any portion or portions of the lines of their road between Quincy and Pensacola, to be designated by the subscribers, and so soon as subscriptions are made sufficient to prepare the roadway for the rails, the company will put such portions of the road under contract, the work to be paid for by such special subscriptions. By adopting this policy, the several sections of the road, from Quincy to the Appalachicola river—from the river to the vicinity of Mariana, and from Milton to the Choctawhatchee river, may be put under contract, and constructed at an early day. This plan having been adopted successfully by citizens of Gadsden county, may, if acted upon on other portions of the line, lead to the same satisfactory results.

7. *Resolved*, That this company will co-operate with parties proposing to construct the road, or any portion thereof, to the waters of Pensacola Bay, in an application to the Legislature of this State for such legislation as may be deemed most advisable, and will best insure the construction of the road, in accordance with the provisions of the Internal Improvement Act of 1855.

We understand that the Board of Directors convened after the adjournment of the Stockholders' meeting, and appointed Commissioners to open Books of Subscription, under the resolution offered by Mr. Walker.—*Pensacola Journal*.

LOUISVILLE AND NASHVILLE R. R.—The entire road will be completed for business by or before the 20th of December next. The tunnel at Muldrough's Hill has so far progressed that daylight may be seen through. It will be prepared for regular trains in the month of October. A regular train will be running between Bowling Green and Nashville by, or before the 15th day of August, by which time, the track across Green river will reach the vicinity of Ritter's, the usual place for leaving the township for the Mammoth Cave, reducing the staging to the Cave to about twelve miles, and between Louisville and Nashville to about thirty-three miles.

The Louisville Courier, in an article announcing the speedy completion of the Nashville road, says that it may be safely assumed that the road will be built at less cost than any in the United States of its length and surface, and when finished, will, regarding its cost, have a less floating or funded debt than any other.

The R. R. from Winchester is completed to within five miles of Fayetteville, Tenn.

[For the Railroad Record.]

THE STEAM RAM.

MESSRS. EDITORS:—I perceive that a good deal of newspaper comment is elicited by the descriptive accounts of the "Steam Ram" which is now in course of construction in England, and which is generally spoken of as a British invention. If you will take the trouble to glance at the accompanying pamphlet, containing the correspondence between an American civil engineer (CHARLES ELLET, Jr.), and the United States Navy Department, which was published and laid before Congress some four years ago, you will perceive that the "Steam Ram" is, in fact, an American invention, which has been repeatedly and earnestly urged upon the Navy Department by Mr. ELLET, but which was originally proposed by the late Commodore BARRON, of the United States Navy. It is much to be hoped that the present able Secretary of the Navy will deem this subject worthy of his official attention. If we can not adopt the effective weapons of defence invented and proposed by our own citizens, let us at least copy or improve them when they are introduced and sanctioned by other nations. BARRON.

THE CORRESPONDENCE.

LAUSANNE, (SWITZERLAND.) }
April 26, 1855. }

SIR: I submit for your consideration some views upon naval warfare, the substance of which I addressed a few months since to the Russian Government.

Steam has never yet been really employed in sea fighting. *Steamships*, it is true, have been introduced into modern navies, but they are used only as sailing ships were previously used, viz., as a means of carrying a floating battery. But that is making no practical application of the power of steam. It is merely following in the wake of an inapplicable precedent.

I propose a change of tactics which will place any good commercial steamer in a position to sink, without firing a gun, any ship of war that now floats. My plan is simply to convert the steamer into a floating battering ram, and enable her to fight, not with her guns, but by her momentum. In short, I propose to strengthen the steamer throughout in the most substantial manner, so that she may be run, head on, into the enemy, and burst in his ribs, or drive a hole into his hull below water line. A hole only two feet square, four feet under water, will sink an ordinary frigate in about fifteen minutes.

I know very well the objections which most minds will raise against this plan at the first blush. Instead of sinking the enemy, it will be suggested, you may sink your own ship. And that would certainly be the result if you should risk the collision with a very weak ship; but I can not consent to assume that there is any builder in the service of the United States Government who is not able so to strengthen the hulls of our steam-frigates that they may be run safely against any man-of-war that has yet been launched. The following is briefly my plan:

Strengthen the hulls of the steamers to be used in this service thoroughly, inside and out.

Let all the timber used in this strengthening run fore and aft.

Let there be a heavy frame, or solid partition, running back from the stem towards the stern, and reaching up from the keelson to the deck.

Let there be another partition, or false bottom, composed likewise of solid timber, laid horizontally fore and aft, just below the water line, to be used for the two-fold purpose of strengthening the hull and preventing the hold from filling if struck by shot between wind and water.

Let there be a false bow, of which the most salient point shall be below water line; and let this salient front or cut-water be formed by the prolongation of the solid central partition.

Let this salient bow carry a cast iron armature, so shaped that under a very moderate collision it shall drive a hole into the hull of the opposing ship two or three feet square.

Let the hold of the ship be divided into separate compartments, so that if any one or two compartments are penetrated by shot between wind and water, the ship will still float.

Let the steamer, if built expressly for this purpose, be provided with a good propeller, even though she may carry side wheels.

If she has no guns, and but a small crew—in other words, if she is a mere merchant steamer, altered for this service—let her deck, especially forward, be cleared of every thing to which a bold enemy might grapple at the moment of collision.

To shelter the small crew let her deck be furnished with traverses, shot proof, behind which the men may stand while approaching the enemy and exposed to his broadside.

Let strength of hull and great speed be the essential and primary conditions sought in the construction or selection of the craft.

A good vessel, fitted up as I propose, will be irresistible, until the enemy meets her with one of the same construction. If her bulkheads and false bottom are properly arranged she may be penetrated, but can not be sunk by shot.

Let common sense answer the question—What will be the effect of a cannon ball, or a broadside of cannon balls, launched against a ship, compared with the shock of a steamer of two thousand tons coming against her at full speed?

As practical illustrations of the correctness of my views, I may state that I have read accounts of five or six accidental collisions at sea in the last six months—sometimes caused by steamers running into sailing vessels and sometimes by sailing vessels running into steamers—and in every case the vessel struck in its waist was sunk, and the vessel which ran into her was enabled to keep on her course. I have noticed two recent accounts of steamers which were sunk almost instantaneously by sailing ships which ran into them and which themselves escaped without injury. The terrible disaster of the Arctic will readily occur to your recollection. In that case both vessels were struck near the bow, and the bow of the French ship (the *Vista*) was completely stove in; but she had a partition forward and was enabled to get into port. Very recently the largest ship in the British navy—the *Wellington*, of 131 guns—in starting for the Baltic, was run into by an American sailing ship and so much disabled that she was obliged to put back and go into dock. If the ship that struck her, instead of a bow-sprit and figure-head to break the force of the blow, had been provided with an under-water false bow shod with iron,

the *Wellington* would have gone to the bottom.

For harbor defence, however much we may continue to raise and arm forts and batteries, I think we should not neglect also to build *floating battering-rams*—great steamers, as near shot and shell proof as they can be made—with a strength of hull, speed, and power that will enable them to crush in the side of a man-of-war by simple collision.

I will not add further arguments. To my understating the efficiency of the plan which I recommend is self-evident; and I hold myself ready to carry it out in all its details whenever the day arrives that the United States is about to become engaged in a naval contest. It is the only mode in which steam may be applied with proper effect in sea-fighting; and I submit the suggestion most respectfully for your consideration now while you are in the act of adding to the steam navy of the country.

I will take the liberty of forwarding this letter to the Hon. John Y. Mason, United States Minister at Paris, with a request that he transmit it to the Department; and I will be happy to receive an acknowledgment of it through the same channel.

I have the honor to be, respectfully, your most obedient servant,

CHARLES ELLET, Jr.

HON. JAMES C. DOBBIN,
Secretary of the United States Navy.

NAVY DEPARTMENT,
Washington, July 21, 1855. }

SIR: The receipt of your letter of the 25th ultimo is acknowledged, and the Department tenders to you its thanks for the views expressed therein. The suggestion to convert steamers into "battering-rams," and by the momentum to make them a means of sinking an enemy's ships, was proposed so long ago as 1832, and has been renewed many times since by various officers of the navy. No practical test has been undertaken, but with the necessary speed, strength, and weight, a large steamer, arranged on the plan proposed by you, would introduce an entire change in naval warfare.

Very respectfully, your obedient servant,
CHAS. W. WELSH,

Acting Secretary of the Navy.
CHARLES ELLET, Jr., Esq.
Lausanne, Switzerland.

Second Letter.

LONDON, August 16, 1855.

SIR: Your letter of May 21st, in reply to my communication of April 26th, proposing the construction of steam battering rams for harbor defence, and to rely on the momentum of our steam-ships, properly strengthened to sink the enemy by collision instead of shot, was duly received.

I was surprised to learn by your reply that this suggestion had been made to the Department more than twenty years ago, and had been repeated since that period by various officers of the United States Navy. Of this fact I have no previous knowledge.

I pursuing the subject further I am actuated by no desire to make myself prominent; for, under these circumstances, no peculiar credit can redound to me from the successful application of this most important suggestion. My purpose now is simply to supply the Department with such facts and arguments in favor of the measure which I and others have proposed, as may possibly lead to its early adoption, and thus render our sea-board, by the

aid of an unrivalled steam marine, proof against the attacks of the combined navies of the world.

In my previous letter, I stated that five or six collisions had been reported in as many months, and that in almost every case the vessel which was struck went down, and the one which ran into her escaped with little or no injury. Since that date I have made notes of the following additional cases of collision, to which I beg leave respectfully to invite your attention. You will please observe that these are not selected cases, used for the purpose of proving the value of a favorite theory, but that the list contains an account of *all* the collisions that have been reported in the European newspapers since I last addressed the Department on this subject.

[Five cases of collision are here recited by Mr. Ellet, with the result in each case.]

In these five cases we have examples of collisions occurring under a variety of circumstances. One is an example of two steamers coming in contact at slow speed. In two of the cases steamers in motion were sunk by ships under sail crossing their track. Two are cases of vessels at anchor, struck and sunk by steamers in motion.

The practical conclusion to be drawn from these facts is apparent. If vessels built for ordinary commercial purposes, and propelled either by steam or sail, invariably sink the vessel which they strike with their bow, when moving with any considerable velocity, while themselves receiving little injury from the collision, it follows, of necessity, and a fortiori, that a steamer expressly designed for such a conflict, strongly built throughout, well fortified at the bow, divided longitudinally and centrally by a solid partition, reaching from the keelson to the deck, and extending from the stem to the stern, and traversely by other partitions, separating the hull into six or eight water-tight compartments, and horizontally by one or more other partitions or floors, of which one shall be below her water-line when light—I say, it follows of necessity that such a vessel, skillfully framed and properly fastened, may be driven at high speed against any ship of ordinary build, in the certainty that the ship of ordinary construction will go down and the battering ship will float.

It will be said that the enemy may strengthen his ships in the same manner. That is true, but if he sends three thousand miles across the sea as solid and swift a ship as we will have to meet him on our own coasts, he must leave behind his guns and shot, a great portion of his fuel, and the supplies for a strong crew, and thus render his ship harmless; for, acting at home on the defensive, we can put the weight of all his material in the frame of a ship and in its defences, and still be a match for him in speed.

Let us suppose that an enemy should enter the harbor of New York, steaming by the forts at the Narrows, as he would do, without stopping to fight them, and lay his forty or fifty gun-boats and mortar-boats around the city, must not that city, relying on its stationary forts, either capitulate or be burned? But what would be the condition of these gun and mortar-boats if assailed by steamers fitted up as I propose? They possess no means to guard against a collision. Their guns and mortars can offer no resistance to a steamer coming against them at full speed; though, if allowed to act according to their rules, they could blow our houses to pieces or burn down our towns.

It may be said that the enemy will present his bow to the approaching steamer, and that

then both ships may be sunk. To meet the argument, admit the fact, and I still contend that the plan suggested is a good one. If our steamer goes down in our own harbor, it is but the temporary loss of a steamer. The small crew can escape upon a life-boat. But if the enemy's ship is sunk, he loses not only a fighting ship, but its armament and crew. Ours can be speedily replaced; his must be brought from the other side of the Atlantic.

But it is not merely for harbor defence that I advocate this plan. I contend that no officer ought hereafter to be permitted to surrender his steamer, however superior the battery of the enemy may be, until he has tried the strength of her frame, by running her, head on, against the opposing ship. The Administration, therefore, ought never to suffer a ship to go to sea for war service without requiring her hull to be so framed or strengthened that she may come off victorious from such an encounter.

As a measure of economy, I think no one will doubt that steam battering-rams will be cheaper to construct and maintain than ordinary men-of-war. In fact, for the first cost of a ship of 100 guns six or eight floating battering-rams can be constructed, each of which will sink that ship in ten minutes after coming within the range of her shot. To man the 100 guns ship will require, I believe, from one thousand to twelve hundred men; to man the battering-ram will require, at the utmost, for harbor defence, twelve or fifteen hands. To keep the 100 guns ship afloat will probably cost, including her depreciation and interest on cost, \$1,500 a day; to keep the battering-ram afloat will not cost exceeding \$80 or \$100 a day.

I do not wish to trouble the Department by pressing a suggestion, which, it appears, has been so often submitted by different parties and rejected or neglected by the authorities. But, convinced that the powers of this plan of defence are not properly appreciated, and that, in the absence of this appreciation, a vicious, and worthless, and costly system is adhered to, I feel reluctant to desist from urging its merits. I have no personal object on earth in view, beyond the wish, common to every citizen, to see our country secured against the possibility of successful maritime attack, and to add in rendering its political influence as potent as its example and success have been, and I trust will continue to be, for all time, throughout the world.

In judging of the applicability of river steamers to this service, it is to be recollected that few of our seaports are accessible to fleets, excepting by narrow channels or a circumscribed navigation. The enemy, approaching in ships of heavy draught, can not, therefore, maneuver much; and if he advances along a narrow channel he can not refuse the collision. The assailing steamers will be exposed to fire but a few minutes, and during those few minutes it will not be difficult to protect them against shot by many simple expedients.

I do not propose to rely in case of war, on a few such steamers as I suggest. Our reliance will be on hundreds of them. With the encouragement of the Government, on four weeks' notice, they will cover the coasts and swarm in all the harbors of the country. Every tug and coasting steamer, of good frame and speed, could be speedily converted into an effective battering-ram, some for deep water, and to encounter heavy ships, and some for shallows, and to run down marauding cutters and light craft.

It ought not to be forgotten that we hold in

hand now a tremendous power, which we have never before used in war—the *steam engine*. I wish this power to be made available, not for carrying about a clumsy gun or huge mortar, but to propel a strong and swift ship, which would strike the vessel bearing that gun or mortar and sink it before the unwieldy metal could be brought into position.

I would earnestly recommend the immediate commencement of this system, at least for harbor defence, by the construction of one experimental battering-ram for each of the great sea-ports of the country—namely, Boston, New York, Philadelphia, Baltimore, and New Orleans, with an additional one for the mouth of the Chesapeake. I would submit the plan and construction of each steamer essentially to the skill of the builders and mechanics of the city which it is intended to defend, leaving only the one which would be designed for the defence of the mouth of the Chesapeake to be built by the mechanics and naval constructors of the Government. Such a distribution of the work would produce a competition of skill and invention which would undoubtedly bring forth models valuable for future imitation.

I earnestly trust that this subject will be regarded as of too much importance longer to escape the serious and practical attention of the Department.

I have, sir, the honor to be, respectfully,
your obedient servant,

CHARLES ELLET, Jr.

HON. JAMES C. DOBBIN,
Secretary of the Navy.

NAVY DEPARTMENT, September 8, 1855.

SIR: I have to thank you for your valuable paper, written in London, August 16, 1855, sent through the United States Minister, Mr. Buchanan. The subject of "steam battering-rams, for harbor defence," and to sink an enemy by collision instead of shot, is of great moment and worthy of grave consideration. This Department, however, possesses but slight discretion in such matters, and can not, without the direction and aid of Congress, undertake the construction of proper vessels and machinery for experimenting. You will, therefore, readily perceive that, however favorably disposed I may be to the adoption of the system proposed by you, I have no power to carry it out.

I am, very respectfully, your obedient servant,
J. C. DOBBIN.

ATLANTIC & PACIFIC RAILROAD MEETING.

At an adjourned meeting of the citizens of San Diego favorable to the construction of a railroad from the Atlantic to the Pacific Ocean, held at the Court-house, in the town of San Diego, on the evening of the 8th of May, 1859, Judge D. B. Kurtz, in the Chair, and Geo. A. Pendleton, Secretary.

The following preamble and resolutions, reported by the Railroad Committee, were read and unanimously adopted:

At a meeting of the Railroad Committee, composed of Col. W. C. Ferrell, Judge D. B. Kurtz, L. Rose, and Dr. D. B. Hoffman, held on Monday evening, May 2d, 1859, the committee was duly organized by electing Col. W. C. Ferrell, as Chairman, and Dr. D. B. Hoffman, Secretary. After due deliberation upon the subject which had been submitted to them, they have framed the following *Preamble and Resolutions*, which they respectfully submit to your consideration, and recommend their adoption:

WHEREAS, the sovereign people of ten of the great South-western free and independent States of this Confederacy, by their representatives in convention assembled, at Memphis, Tennessee,

have unanimously declared and agreed among themselves, favorable to the immediate construction of the Pacific Railroad from Memphis *via* El Paso, to San Diego: and *whereas*, without regard to party or sectional interests, it is admitted by all, to be the "great measure of the age," and the aforesaid Convention, after mature deliberation, and after duly consulting and examining the able reports of explorers and engineers—from the time of Col. J. C. Fremont to Lieut. Parke, and the surveys of Civil Engineers C. H. Poole and K. Rauschenbach, employed by the San Diego Railroad Co., who have surveyed the route from San Diego to the mouth of the Gila river, demonstrating that no obstacles of a serious nature exist, to the construction of a direct line from this place to the Gila river, and adopting the report of Col. J. B. Magruder, in reference to the same, have come to the unanimous conclusion that this is the only feasible and practicable route on which to construct said Railroad, therefore, be it

Resolved, by the people of the city of San Diego, in mass convention assembled, That we do heartily and cordially respond to the spirited proceedings of the Railroad Convention held at Memphis, Tennessee, by our co-workers in this important undertaking of the great Southwest.

And be it further *Resolved*, That we cordially acquiesce and willingly fraternize with all Americans interested in the welfare and great growing glory of the Union, and that, with them, we share largely in their high resolves, noble aspirations, and their true interests, and act in concert with them to perpetuate inviolate our great Confederacy.

And be it further *Resolved*, That we adopt the able report of Col. J. B. Magruder, made in 1853, which demonstrates in unmistakable language, the superior advantages of the Southern route, the fine climate, and capacious harbor of San Diego.

And be it further *Resolved*, That, in our opinion, the Southern route for a Railroad, from Memphis *via* El Paso to San Diego, is the only practicable and feasible one for the construction of a Railroad from the Atlantic to the Pacific, and as it is accessible at all seasons of the year, it will be of equal advantage to all parts and portions of the Union.

And be it further *Resolved*, That from all reliable information—taken from the able reports and estimates, etc., of Engineers who have examined and surveyed this route—that it is the shortest, the cheapest, and the best.

And be it further *Resolved*, That every consideration of a national and international character—of peace and war—of national glory and renown—of prosperity and adversity—imperiously demand the immediate construction of a Railroad to the Pacific.

And be it further *Resolved*, That as Congress has, without the least hesitation, voted many millions of acres of the public domain to the local railroads in the different States of our Union, that we are of the undivided opinion that the recent course taken by that honorable body in relation to the Atlantic and Pacific Railroad bill, was not consistent, and that those who opposed said bill should be highly censured, as this is eminently a national work—a work which will benefit every part of the Union—the work of all others on which the purity and integrity of the Union depend.

And be it further *Resolved*, That the constitutional argument in favor of such a road has been exhibited in a manner to defy all answer but that of stubborn monosyllables.

And be it further *Resolved*, That we heartily endorse the eminently popular course pursued by our Chief Magistrate, so clearly set forth in both of his messages to Congress, and in his able and fearless advocacy of a Railroad to the Pacific, which is of such vital interest and importance to us. And further, that we sincerely trust and depend on him to press on this great and important national undertaking to at least a commencement, that his administration may be honored with the glory that this measure will shadow forth on it for all time to come.

And be it further *Resolved*, That we admit the necessity of the annexation of Cuba, either by purchase or otherwise, and that we unhesitatingly favor the measure with all due patriotism. But at the same time we unhesitatingly and unblushingly say, and think, that those members of Congress who have advocated and been ready to vote two or three hundred millions of dollars for the purchase of Cuba, and at the same time have been opposed to voting the small sum of sixty-eight millions of dollars for the construction of a Railroad, which would bind the Union together, and ultimately be of more importance toward the prosperity and perpetuation of this Confederacy, than Cuba possibly could be, with all her sister isles on the Spanish main, should be censured and ever after marked.

And be it further *Resolved*, That the regularity, safety and dispatch with which the United States Mails have been, for nearly two years, transported from San Antonio, Texas, to this city, by the San Antonio and San Diego Mail Company—the PIONEER LINE across the continent, and the only one which has never made a failure of any kind—a line organized when the country to be traversed was almost unexplored, and known but partially even by the trapper or tardy immigrant, and the success which inaugurated every other enterprise of a similar character across the country—has demonstrated in the most conclusive manner the superiority of the El Paso and San Diego route.

And be it further *Resolved*, That the hearty thanks of the people of San Diego and of South Carolina are due not only to the administration which inaugurated, but to the contractors who have so nobly carried out the above-named enterprise.

The meeting then adjourned. *sine die*.

D. B. KURTZ, *Ch'mn.*

GEO. A. PENDLETON, *Sec'ry.*

[*San Diego Herald.*]

THE MICHIGAN SOUTHERN R. R. DISASTER.

OFFICIAL STATEMENT OF THE DIRECTORS.

TREASURER'S OFFICE, New York, }
Thursday, July 21, 1859. }

The following is an abstract of the material parts of a report recently made to the Directors on the subject of the late accident near Mishawauka:

The train consisted of six cars—three of the first class, containing 139 persons, including eight trainmen, 19 laborers—employees of the company—and about six free passengers. It left Chicago at 8 o'clock, P. M., the 27th June, and arrived at the place of the accident about 12. At this place there had been a most unprecedented fall of rain for five or six hours, which had carried away a culvert with an embankment 22 feet high over it. The whole train fell into this ravine. By this accident 39 persons lost their lives, of which 9 were employees of the company; 34 were taken out dead; 4 died after being removed; and one, a female, was found floating in St. Joseph's river. After diligent search, no other bodies have been found, either in the gravel or the river, and only one is said to be missing who was on the train.

The Superintendent reports the number of more or less injured at 42—10 of them severely, the others slightly. Many went on in the next train, and a week since only six remained in the vicinity. A list of the killed and injured may be seen at this office.

In the ravine where the accident happened, is what is called a dry run, where there is usually little or no water, except after a rain.—When the road was made this ravine was spanned by wooden trestle work, as stone

could not be readily procured until it could be transported over the road: It was always intended to replace this and many other similar works, with masonry and embankments, before the wood-work should decay. At this point the culvert was built in 1857, and was of superior masonry, of selected dimension stone, brought from Chicago—about 90 miles. It was constructed under the direction and immediate supervision of E. H. Williams, the Division Superintendent and Engineer on that part of the line, who gave his instructions directly to the masons, or to the road master.—The culvert was at least seven feet spare in the clear, from eight to nine feet high, and had fifty-seven square feet of water way. This was sworn to by three witnesses before the jury of inquest, one of whom had measured it within five weeks, with a view to an official report to his employers.

The verdict of the jury states the size of this culvert as "4½ feet wide, and 4½ feet high, and that it ought to have been as large again." At the size they state, it would have had 27 feet superficial area. All the evidence of the company has on the subject shows it was more than "as large again" as the dimensions stated by the jury. Upon what evidence their statement is made I can not say, as I left soon after the three witnesses had testified, and the verdict was not rendered until a week or two thereafter.

Mr. Williams, the Division Superintendent, and Mr. Rowers, the Road Master, both of large experience, after an examination of the country to be drained, were satisfied the culvert was abundantly large for any contingency. Both of them state that, until this accident, they had never heard a suggestion from the neighbors, or others, that the culvert was too small. The storm was an unprecedented one; more like a succession of water spouts; commencing at 4 or 5 o'clock, P. M., and continuing till near 11. At 8.30 the train from the east passed over the ground, between 7 and 8 o'clock, the Section Foreman, Dennis Kane, went over this part of the road with one of his men, and there was no appearance of danger. At 10 o'clock, Mr. H. Dinslow, who lives on the brink of the ravine, went out and examined, and states that the water was passing through the culvert freely, and did not fill more than half its area.

The Division Road Master was on duty on the train, and, with the engineer and fireman, was killed.

The train had been running slowly, and had made frequent stops to examine culverts and bridges. The last stop was at a bridge about one mile from the ravine; and it could not have attained a speed of more than at the rate of from fifteen to twenty miles per hour in passing over that one mile.

The water subsided so suddenly that in twelve or fifteen hours after the accident the stream could easily be stepped over; and one week later, one who saw it, said he should not suppose there was more than enough to fill a two-inch tube.

By order of the Board of Directors,
GEO. BLISS, Pres't.

The Preston and Berlin Railroad, stations and material, are advertised to be sold by auction at Hamilton, on the 20th of October next, under the conditions of a mortgage, securing the principal and interest of the Bonds issued by the company.

The road is about eleven miles long, and in operation for about three months in 185

RAILWAYS AND STEAM COLLIERS.

We copy the following interesting article upon the history and progress of Railroads, from *Newton's Journal of Arts*, being a paper read before the British Institution for Mechanical Engineers:

Although railways may now be said to belong to the whole world, there is no doubt that they had their origin in the county of Durham. It would appear that railways were first used in the north of England about the end of the sixteenth or commencement of the seventeenth century. At that time nothing but horses were used; and the railways being of timber, the general performance was 42 cwt., drawn on a level by one horse. Malleable iron plates appear next to have been used, fastened upon the upper surface of the wooden rails, to lessen the resistance; and about the year 1738, cast iron appears to have been used for rails, and about 1815, solid malleable iron rails were first introduced for railways.

In the early period of railways, it does not appear that, although the coals were generally brought from the distant collieries down considerable inclinations, the use of gravity or self-acting planes were resorted to. The full load for one horse was one wagon containing from 2 tons to 53 cwt. of coals. The number of horses employed at some of the collieries may be judged of by the fact that one firm of coal owners, namely, Lord Ravensworth and his partners, had 300 hired horses, or employed cartmen in finding that number for the western section of their collieries. It is not ascertained when gravity or self-acting planes were first employed for the motive power of railways; certainly to a very small extent previously to the commencement of the last fifty years. They are now, however, constantly employed on private lines of railway where the inclination or other circumstances render the line unfitted for the use of locomotive engines.

Fixed steam engines were the next description of motive power, in point of time, which was used on railways,—dragging the wagons by means of ropes from one station to another, or up steep planes; they were exclusively used on private railways.

The use of locomotive engines is of a comparatively recent date. Although as early as 1769, the attention of Mr. Watt appears to have been drawn to this subject, and in 1784, he describes modes of applying engines to the moving of wheel carriages. Messrs. Trevethick and Vivian were the first to apply the power of steam to a machine to run upon railroads; and in 1804, a machine was tried by them on the Merthyr Tydvil Railway, which drew after it 10 tons of bar iron a distance of 9 miles, at the rate of 5 miles an hour. The obstacle, at that time, was the supposed want of adhesion of the wheels upon the rails to propel the engine forwards, and to drag the load; and to obviate this, Mr. Blenkinsop, of Leeds, introduced, in 1811, a rack or toothed rail, into which cog-wheels, placed on the engine, worked, and it was thus propelled forwards. In 1812, Messrs Chapman had a chain stretched along the line of railway, which the engine laid hold of, and thus dragged itself forwards; and Mr. Brunton, in 1813, had an engine made with legs, by which it was propelled. Mr. Trevethick sent an engine to the Wylam colliery, in Northumberland, but did not answer. Mr. Heddy, however, Mr. Blackett's engineer, improved the engine, and applied it by means of the adhesion of its wheels on this railway; and he was unquestionably

the first to prove that it was practicable to apply, to a certain extent, an engine which could propel itself, and also drag a considerable load after it, by means of the adhesion of the wheels upon the railway.

Mr. George Stephenson then made his appearance, in connection with the locomotive engine. He had been recently appointed engineer to the Killingworth colliery, and, as such, recommended the use of the locomotive engine. Mr. Blackett's railway was a tram-railway, with plate rails, whereas, the Killingworth rails were round-topped rails; but experiments were made upon them which proved that the latter rails presented as much adhesion to the wheels as the plate rails; and the resistance to the carriage being less, there appeared no reason why a locomotive engine should not be used upon the edge rail as upon the plate rail. Accordingly, an engine was constructed by Mr. Stephenson, and tried on the Killingworth railway, in 1813; the result was perfectly satisfactory. This engine had two cylinders, which were placed vertically on the top of the boiler, with a cross-head to each cylinder, and two side rods working cranks on the driving wheels. On an ascending inclination of 1 in 330, it dragged a load of 40 tons at the rate of 6 miles an hour, or a gross load of 70 tons,—the weight of the carriages being 20 tons, and the engine and tender 10 tons. Upon the Stockton and Darlington Railway, with a more powerful engine, the gross load conveyed was about 87 tons, the useful load 48 tons, the weight of the carriages being 24 tons, and the engine and tender 15 tons. Such was the performance of the engines improved by Mr. Stephenson, until the year 1829, when the important competitive trial took place upon the Liverpool and Manchester Railway—the essential drawback to their utility and performance having, hitherto, been the want of sufficient evaporating power of the boilers, and the consequent inability to employ engines with larger cylinders or of greater power. The immediate result of this trial of skill was the adoption of multitubular boilers, which presented a vast increase of evaporating surface, and led to the great increase of power of those engines, and their consequently increased performance. So that, instead of 40 tons of goods conveyed at the rate of 6 miles per hour, being the maximum performance of locomotive engines, as was the case but 30 years ago, engines on railroads of the same description are now conveying a net load of 300 tons of coals, from near Newcastle to London, over all the intervening grades at the rate of a minimum speed of 14 miles per hour; and a train of passengers and carriages, of more than 150 tons gross weight, at upwards of 40 miles per hour; the weight and cost of the engines are, however, greatly increased.

Most important consequences to the coal trade of the two northern counties have resulted from this development of the locomotive engine; for we had the railways conveying coals from those counties to the amount of 2,903,497 tons, in 1857; and in the same year, there was conveyed to within the limits of London, from the collieries in the midland district, the enormous quantity of 1,206,775 tons of coal, exclusive of the quantity of coals conveyed to the different towns and villages of all the southern parts of the kingdom.

There has also been an extensive application of iron steam vessels for carrying coals, forming the class of screw colliers at present used, which have had an important bearing upon the economy of transit of coals "sea-borne." This has all taken place within the last four or five years. The general size of the screw colliers is about 465 tons register, and 140

tons engine room; drawing about 13½ feet of water, when loaded; being 167 feet in length, 27 feet in width, and 16 feet depth of hold. The engines are generally about 70 horse power, and the vessels carry about 600 tons of coals. Their speed is about 9 miles an hour, and they generally perform the single voyage between London and the northern ports in about 30 hours. They are constructed to use water as ballast in the return voyage, which is a great advantage, and is peculiar to iron vessels, which have much greater capacity than wooden vessels, with the same displacement of water. The iron vessels, in fact, admit of space sufficient for a cargo of coals which will put the vessel deep enough in the water when fully loaded, and also allow adequate space for tanks, to contain about 220 tons of water, as ballast in the return voyage. The increased facilities afforded for loading the colliers at the large coal drops, enable them to take in their whole cargo, of 600 tons, often in a single tide; and the result of the employment of these vessels to convey coals to London and some of the southern ports, has been that, when proper facilities are given for unloading the coals in about the same time, they make nearly a voyage every week, and a total of between 40 and 50 every year, between the northern ports and London. They thus compensate most effectually for the effect of the conveyance of coals by railway from the midland counties, by reducing the cost of conveyance considerably below that by railway, at the lowest rate of ½d. per ton per mile. The sailing vessels previously employed as colliers made only one-fourth the number of voyages per year, and seldom reaching 12 voyages.

Steamboats themselves may be considered to be included among the inventions of the last half century; for, although the project was, no doubt, started by Symington, in 1789, it was not until 1802 that he actually constructed a boat propelled by steam, on the Forth and Clyde Canal, for the purpose of towing other vessels; and it was only in 1807, that a steamboat was started on the Hudson river, in America, by Fulton. The writer recollects going down the Tyne, in 1814, with Mr. George Stephenson, in the first steamboat on that river. It appears that they were first regularly employed on the Clyde in 1812; on the Thames in 1815; and in 1819, the first steamboat crossed the Atlantic, commencing the important era of steam navigation.

CONSTRUCTION OF LOCOMOTIVES.

The practice of the construction of locomotives has reached such a degree of perfection, as far as mechanical skill and combination is concerned, that any reasonable demand may be satisfied. But whenever we inquire into the principles causing a leading influence on those constructions, we meet with the most different views and contradictory opinions. And while generally nobody thinks of such general principles which are designed to rule the right construction for any locomotive and under whatever circumstances, it will often be asserted the introduction and adoption of such general principles to be impossible. In consequence thereof, it has become a general rule of our constructors either to copy other existing arrangements, or to follow their most arbitrary and personal inspirations, mostly without any regard to the laws of science and the experience of other authorities. The results of this course are the many different locomotives which run upon our present railroads, and represent not only a very costly

collection of patterns, but add to a great extent to the origin of the economical results, which discredit the noble invention of the steam-power.

With the increasing development of the railroad system, a great many points are required in the perfection of locomotives, which, on account of their economical nature, are of the highest importance for the future of this medium of transportation. This problem could not be solved with any degree of certainty by the abstract practice; which, although proceeding in the course of useful inventions, and producing a variety of practical machines, is unable to account for those varieties. And, in fact, it is not a matter for the practice, but for science to select from the given varieties the useful, and fix the rules and the laws.

Arrived at the point where science has decided between useful and useless results of practical experiments of locomotive constructions, I will now proceed to introduce the final results of scientific investigations and reduce them to simple laws, applicable to the use of the practical mechanic.

I take it for granted that any educated mechanic knows that Pambour first expressed the fundamental idea with consciousness, that in the condition of steadiness of conformation of any machine the average strength and resistance keeps the equilibrium, and also, that the quantity of the disposable motoric substance is just as large as that quantity which leaves the machine after it has produced its effect.

These principles give us the most important inferences about the average speed of a locomotive. But for the use of locomotive construction, these principles don't amount to any thing, because their construction is independent from the average speed, but depend on the knowledge of the laws of their disturbing motion.

It can not be expected that I should repeat a full analysis of the investigations by which the laws of the construction of locomotives are found, but I must limit myself to a selection of the results of those investigations, which are of practical use for the mechanic. As soon as these are known, we are able, with the assistance of the general principles of the science of mechanics, to fulfill the conditions of which the result is either a complete perfection of the construction of a locomotive, or at least to avoid the dangerous effect of those disturbing motions. What we found to be of general importance in the course of these investigations, may be here repeated in general terms.

1. Any locomotive has six different degrees of speediness within which the disturbing motions are very violent, and may even go beyond any limit, but by means of certain dispositions and constructions it can be effected that all those dangerous degrees may be extended beyond the greatest velocity, with which it is intended to run the locomotive.

2. The disturbing motions result partly from the pressure of the slides against the slide guides; partly from the variable pressure of the axles against the axle-boxes and axle-forks. The causes of the disturbing motions are:

- a. Vertical vibrations of the center of gravity of the material attached to the springs.
- b. Revolving vibrations around a longitudinal axis of this material through its center of gravity.
- c. Revolving vibrations around a traverse axis through said center of gravity.

3. When a locomotive passes once into the greatest speed the disturbing motions increase with the increase of the speed until the same has reached its highest point, during which time they become infinitely small; with the decrease of speed these motions will be greater again in a reverse proportion.

4. To construct a perfect locomotive is not an impossibility, but depends upon the application of the rules and laws resulting from the knowledge of the disturbing motion.

5. A locomotive which is to fulfill its object must move with absolute uniform velocity, and in such a manner that each of its points describes with the axis of the track, a perfect congruent curve.

In consequence of these investigations and in connection with some co-efficients of experience, we are now in the situation to determine the arrangement of a locomotive, and give rational rules for the most important details of its construction. These rules and laws, established by the knowledge of the laws of the disturbing motions as the *rules and laws for the construction of locomotives*, under the following heads. (The formulas thereof can not be given at present):

1. Proportion between the weight of a locomotive and its normal drawing power.
2. Total resistance of a train and the weight of a locomotive.
3. Proportion between the total weight of a locomotive and the pressure of the driving-wheels against the track.
4. Diameter of the driving wheels.
5. Number of driving wheels.
6. Number and diameter of the truck-wheels.
7. Conicity of the wheels.
8. Velocity of the piston and piston stroke.
9. Length of the driving rod.
10. Section and diameter of the cylinders.
11. Details of the boiler.
12. Position and burden of the axles.
13. Construction of springs.
14. Axle-journals for truck and driving-wheels.
15. Diameter of the axles.
16. Metallic strength of cylindrical bodies.
17. Details of the fire chamber and tender.
18. Strength of the top bars of the fire-chamber.
19. Heating of the boilers.
20. Mathematical construction of the "link motion."

As some remarkable results, indicated by these laws, we state:

1. That the supposition of some engineers that the greatest extension of the fire-chamber is the desideratum in the construction of locomotives, proves unfounded and a serious mistake.
2. The conicity of our present wheels is too small.
3. All locomotives originated by Stephenson ought to be rejected; the systems of Cramp-ton, Norris, Maffey, and Engert, to be altered according to the mentioned laws.

The system of D. C. Raub avoids the dangers of the disturbing motions entirely, dispenses with the use of a tender, and saves at least twenty-five per cent. on fuel, and gains just as much on motive power. An explosion of the boiler is impossible; the discharge of sparks and dust is prevented, and the safety of operation more than at any time secured.

The locomotive of Mr. Raub dispenses also with the uses of firemen and brakemen, and is independent of the use of turn tables.—*Cin. Commercial.*

CAMBRIA RAILROAD IRON.

Street Rails for Passenger Railroads in Western Cities.

Wood, Morrell & Co., lessees of the Cambria Iron Works, during the twelvemonth beginning July 1, 1858, and ending June 30, 1859, manufactured 27,872 tons of iron rails. This large quantity was all made to order, for railroad companies in the west and south-western States, except a portion used by the Pennsylvania Railroad Company, in their tracks at Altoona, and elsewhere in the vicinity of the Allegheny mountain, where the character of the service performed requires that the rails shall be of the best and most enduring quality of iron.

The geographical position of the Cambria Iron Works, at Johnstown, at the base of the western slope of the Allegheny mountain—whence a line of canal via the river route, and a line of railroad via Greensburg, opens two outlets to free river navigation at Pittsburg, whence by steamboat rails can be delivered at all points on the navigable waters of the west, and by car to all inland places not accessible by water craft—enables the lessees to send their excellent rails into a vast market, upon terms mutually advantageous to the railroad companies and the iron-masters.

The reputation of Cambria rails is unsurpassed; and this fact, considered in connection with the mineral resources of the immense landed estate belonging to the Cambria Iron Company, abounding with coal and ore, renders it certain that, under the efficient management of the present lessees, the Cambria Iron Works will continue to acquire new importance, and fill orders in larger amount from year to year.

For the supply of street rails for city passenger railroads in western cities, Wood, Morrell & Co. possess unequalled facilities. And a knowledge of this truth prompted us, months ago, to allude to this new source whence orders for CAMBRIA RAILS would be forthcoming. It, therefore, gives us pleasure to announce that a contract has been entered into with the lessees, for street rails for the Pittsburg City Passenger Railroad; and soon, we have no doubt, other contracts will be made for street rails to be laid down in Cincinnati, Louisville, St. Louis, Chicago, New Orleans, and other cities. Everywhere in the cities of the west and south, is public attention called to the matter of horse railroads in the public streets, and soon the tracks will be down and the cars in motion.

In surrendering her streets to private corporations, to occupy them with their iron tracks, the city of Philadelphia parted with a source of extraordinary large revenue. Here the city corporation should have put down the city passenger tracks and then have leased them to parties who would have furnished the equipments, etc., and divided the revenue equally with the city. In this way, on a small outlay—the graded streets already belonging to the city—an immense revenue would have accrued to her treasury, and the streets would have remained in her control. Then, too, the city, receiving one-half the fare charged, the passenger, while enjoying his ride, would have been paying his taxes; for, in proportion as the revenue derived from the passenger railroad companies increased, would the direct tax-levy have decreased upon property, which now bears the entire burthen of taxation; whereas the present income received from the license tax on cars running upon the city passenger railroads, is too small to be taken into

account as a means of revenue for paying the expenses of the city.

How the western cities may manage their passenger railroads, we know not; we only know they will have passenger railroads in their streets; and, consequently, as the importance and advantage of a superior rail for such service is manifest, we have made mention of the lessees of the Cambria Iron Works, as a firm having all the facilities to fill orders for street rails for western cities, with promptitude and satisfaction.

The subject, at any rate, is worthy the consideration of our readers in the west and south, who are now agitating the question of city passenger railroads, and who will, ere long, be in the enjoyment of their accommodations, for everywhere is heard the voice of discussion in their behalf, and the note of preparation for their construction.—*Mining Register.*

MONETARY AND COMMERCIAL.

At the present moment we have to report a straightened money market. Various causes have tended to this result, the most prominent of which is the Missouri Bank Note operations. This not only took a large amount of currency immediately from the counters of our Bankers, but also the large influx into the hands of our Merchants of this class of currency, has been carried by them in their own vaults, thus decreasing the amount of their current deposits, this together with a slight drain for produce movements has seriously effected the *very limited* banking facilities of our great commercial and manufacturing center. Hence Bankers discount as little as possible for their customers at 10@12. Outside rates are necessarily run up higher and are onerous. This state of things is truly ridiculous! When will it end? Cincinnati ought to have ten Banks at least, with an actual cash capital of a million each, who would pay out their own currency over their counters, and not the mixed up trash of all creation. The business of Cincinnati needs it, and the sooner it is carried out the better.

Eastern Exchange is in excess of supply over the wants, and consequently flat. Missouri is also the cause of this.

The earnings of the Michigan Central Railroad during the second week in July this year and last, were as follows:

	1859.	1858.
Passengers.....	\$13,769 32	\$22,219 25
Freight.....	9,389 98	14,640 68
Total.....	\$23,159 30	\$36,829 93
Decrease.....		13,700 63

BUFFALO, NEW YORK AND ERIE R. R.—The following is a statement of the earnings of the Buffalo, New York & Erie Railroad, (Buffalo to Corning,) for the month of July, 1859, as compared with the same month of last year, showing an increase:

	1859.	1858.
Passengers.....	\$14,181 65	\$14,251 67
Freight.....	25,506 05	26,054 16
Other Sources.....	1,271 92	1,540 17
Total.....	\$40,959 72	\$41,846 00

We annex the following quotations from Hewson & Holmes' Stock Circular:

No important change has taken place in the market for Bonds and Stocks since the date of our last report. The prices for Bonds have been fully maintained with very few offerings, and at our quotations there are more buyers than sellers. In Stocks, the feeling has not been quite so firm and prices are a little weak, this, however, must soon give way before the reported increased earnings of the several roads centering at this point. The Little Miami, Cincinnati, Hamilton and Dayton, and Indianapolis and Cincinnati

Companies, all show a handsome increase over the month of July of last year.

The demand for money has been quite active for this season of the year, and the scarcity of currency among the banks and bankers has caused more difficulty in negotiations, without, however, any quotable increase in the rates, the Discount Houses still charging 10 to 12 per cent., and street rates varying from 1½ to 2 per cent. per month.

The market for Eastern Exchange is heavy, and we quote on all the principal cities, 40 cents premium buying and ½ premium selling rates.

CINCINNATI STOCK SALES.

BY HEWSON AND HOLMES.

August 3, 1859.

BONDS.

\$6,000 Cin., Ham. & Dayton R. R. Co. 7 per cent. 2d Mort. Bonds.....	85
\$4,000 Cin., Ham. & Dayton R. R. Co. 7 per cent. 1st Mort. Bonds.....	92 and int.
\$3,000 Little Miami R. R. Co. 6 per cent. 1st Mort. Bonds.....	85 and int.
\$10,000 Cov. & Lex. R. R. Co. 2d Mort. Bonds.....	53 and int. same rate.
\$1,000 Cov. & Lex. R. R. Co. 10 per cent. Income Bonds.....	12½
\$2,500 Col. & Xenia R. R. Co. Dividend Bonds, due in 1866.....	90
\$3,000 Ohio & Miss. R. R. Co. 7 per cent. Construction Bonds—not capitalised.....	25 and int.
\$1,000 Hamilton County, Ohio, 8 per cent. Bonds. Due 1863.....	102
\$5,000 City of Cincinnati 6 per cent. Municipal Bonds.....	90
\$2,000 Indianapolis & Cin. R. R. Co. 7 per cent. 2d Mort. Bonds.....	85
\$1,000 Dayton & Western R. R. Co. 7 per cent. 3d Mort. Bonds.....	25
\$1,000 Town of Perryburg, Ohio, 6 per cent. Bonds.....	50

STOCKS.

100 Shares Indianapolis & Cin. R. R.....	50
28 " Cin., Ham. & Day. R. R.....	65
50 " Little Miami R. R. Co.....	83
35 " Col. & Xenia R. R.....	82
20 " Farmers' Bank Ky.....	113
\$3,100 Ohio Life Insurance and Trust Co. Certificates.....	22½

RECEIVER'S SALE.

By virtue of a Judgment of the Court of Common Pleas of Muskingum County, Ohio, rendered in a certain case therein pending, in which the "Clinton Bank of Columbus is Plaintiff, and Douglas, Smith & Co., and others, are Defendants, I will offer for sale, at the Court House, in the City of Zanesville, in the said Muskingum County, at the hour of one o'clock, in the afternoon, on the 13th day of September next, the following described parcels of land, situate in the Western Addition to the said City of Zanesville, as the same is designated and delineated upon the plat of said addition, recorded in the Recorder's office, of said county, in the Record of Plats, Book No. 1, page 13, &c.; that is to say, Lots Nos. 1, 2 and 3, of square 17, in said "Western Addition," appraised at \$150 each. Lots Nos. 4, 5 and 6, of said square 17, together with the strip of land between the south-eastern ends of the said lots, and lots Nos. 10, 11 and 12, in the said square, said strip of land being about 16 feet wide, with the buildings erected on the said lots and strip of land, and the fixtures and appurtenances thereunto belonging, appraised at the sum of \$6,300. There are erected on the said lots, a brick shop, for the manufacture of passenger cars, 120 feet by 50 feet, roofed with slate, and also a wood car shop, 120 by 40 feet; steam engine and Boilers; 2 Daniels' Planing Machines; 1 upright saw; 1 Turning Lathe, Shafts, Cones, Pulleys, Hangers, &c., connected with said machinery.

Lots Nos. 7, 8, 9, 10, 11 and 12, of said 17th square, with the buildings erected thereon, and the fixtures and appurtenances thereunto belonging, appraised at \$7,000. There are erected on said parcels, a Brick Machine Shop, 80 feet by 40 feet; a Forge Shop, 40 feet by 40 feet, containing 8 forges; a Carpenter Shop, 120 feet by 26 feet. Foundry buildings, one Lathe, 6 feet swing; 1 Boring Machine; 1 large Screw Cutting Machine; 1 Planing Machine; 3 Hand Lathes; 1 large Drill Press; 2 small Drill Presses; 1 wheel press; 1 Foundry Fan; 2 Screw Cutting Machines; 1 small Drill Press; Shafts, Pulleys, &c., used with said machinery.

Lots Nos. 1, 2, 3, 7, 8, 9, 10 and 11, of square 21, in said Western Addition, appraised at \$150 each.

Lot No. 4, in said square 21, on which is erected a small dwelling house, appraised at \$250.

Lots Nos. 5 and 6, in said square 21, with the buildings thereon, and the fixtures and appurtenances thereunto belonging, appraised at \$200, on which lots is erected a large Foundry building, with Crane, Cones, &c.

Lot No. 12, in said square 21, on which is erected a stable, appraised at \$250.

Lots Nos. 1, 2, 3 and 4, in square 16, in said Western Addition, on which is erected a large frame building, appraised at \$1,000.

Lots Nos. 5, 7 and 8, in said square 16, appraised at \$150 each.

Lot No. 6, in said square 16, appraised at \$175.

The said parcels of land are situated on the line of the Central Ohio Railroad Company, on the west side of the Muskingum River, and immediately opposite the city of Zanesville, and formerly occupied, in part, by the Machine Shops, Foundry, Car Manufactory, &c., of Douglas, Smith & Co., known as the "Muskingum Works." The "works" are well arranged and convenient, and have capacity for a force of from 100 to 150 men. The location is healthy, and the facilities for procuring pig iron, coal, &c., render the location one admirably adapted for such "works." Terms Cash.

And I will also, on the 14th day of September, 1859, at one o'clock, P. M., at the said "Muskingum Works," offer for sale the following personal property used in said "works," to wit:

2 Axle Lathes, 22 inch swing; 1 Axle Lathe, 26 inch swing; 1 Slide Lathe, 20 inch swing; 1 Slide Lathe, 15 inch swing; 1 Slotting Machine; 1 small Slide Lathe; 2 Slide Rests; 1 Grind-stone, with shafts and fixtures; 8 Blacksmith vices, work benches and clamps; 1 Screw Cutting Machine, No. 40; 12 large Anvils; 13 sets Blacksmith Tools; 2 Ripping Saws; 1 Cut-off Saw; 1 large and 1 small Tenoning Machine; 1 Tongue and Grooving Machine; 1 Mortising and 1 Boring Machine; 1 Caul.

Terms Cash.

JOHN TAYLOR, Jr., Receiver.

Aug. 4, '59

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co., Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase. Ag. 4, m. 6.

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANA OR SANDOVAL

FOR

Decatur, Springfield, Bloomington, Peoria, Burlington, Quincy, La Salle, Rock Island, Dixon, Galena, Prairie du Chien, St. Paul, and St. Anthony, and all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANA for all the above points.

Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via

PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all

TOWNS ON THE UPPER MISSISSIPPI

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,

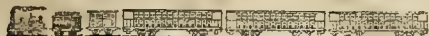
Gen'l Southern Agent, Cincinnati.

W. P. JOHNSON,

Gen'l Passenger Agent, Chicago.

June 21, 1859.

Cincinnati, Hamilton and Dayton



RAILROAD.

FOUR TRAINS

LEAVE THE SIXTH STREET DEPOT DAILY.

TRAINS RUN THROUGH TO RICHMOND, LIMA,
SANDUSKY, AND DELAWARE WITHOUT
CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND
NORTH-WESTERN CITIES.

(Columbus time, which is seven minutes faster than Cincinnati.)

6 A. M. EXPRESS TRAIN—For Cleveland and Pittsburg, via Delaware, makes close connection at Crestline for Pittsburg, Baltimore, Philadelphia and New York; and at Cleveland for Dunkirk, Buffalo, Boston and New York. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 7:20 P. M., Quincy and Galena at 7 A. M. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Muncie. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

S. A. M. MAIL TRAIN—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STEAMER FOR DETROIT; at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at Delaware with the C., C. and C. Road, for Cleveland and points East. Also connects with Junction Railroad at Hamilton for Oxford.

4:30 P. M. TRAIN—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Also, connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago. Also connects with Junction Railroad at Hamilton for Oxford.

6 P. M. TRAIN—For Dayton, Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 8 A. M.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; at the new Ticket Office on West side of Vine street, between the Post Office and the Burnet House; or at the Sixth Street Depot.

D. McLAREN, Superintendent.

FREEDOM IRON COMPANY,

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods,

Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't.

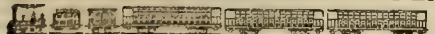
This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works.

June 9.

New Time Table

OF THE

NEW YORK CENTRAL R. R.



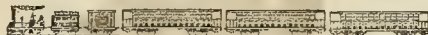
Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp. 7:00 A. M.	7:00 P. M.	7:00 P. M.
Mail 9:40 A. M.	12:50 A. M.	
New York Exp. 11:15 A. M.	9:00 P. M.	9:00 P. M.
Night Exp. 5:00 P. M.	4:00 A. M.	4:00 A. M.
Utica Accom'n. 6:00 P. M.	Ar. U. 10:00 P. M.	
N. Y. Mail 11:15 P. M.	10:00 A. M.	10:00 A. M.
Leave Buffalo.	Leave Bridge.	Ar. Alb'y.
New York Exp. 5:15 A. M.	5:15 A. M.	3:30 P. M.
Steamboat Exp. 8:00 A. M.	8:00 A. M.	8:00 P. M.
Mail 11:00 P. M.		2:30 P. M.
Cleveland Exp. 6:20 P. M.	6:00 P. M.	4:40 A. M.
Cincinnati Exp. 11:00 P. M.	11:00 P. M.	8:30 A. M.
Utica Accom'n.		10:00 A. M.

Commencing April 11, 1859.

LITTLE MIAMI

AND—

COLUMBUS AND XENIA



RAILROAD.

FOUR TRAINS DAILY.

Three Through Express Trains.

FIRST TRAIN—No. 1 Express, at 6 A. M., connects via Columbus and Cleveland; via Columbus, Crestline, and Pittsburg; Detroit via Cleveland and Steamers. This train stops between Cincinnati and Columbus, at Loveland, Deerfield, Morrow, Xenia, Cedarville, South Charleston, London, and West Jefferson.

SECOND TRAIN—No. 2 Express, at 8:30 A. M., connects via Columbus, Bellair, and Benwood; Wheeling, via Columbus, Steubenville, and Pittsburg; via Columbus, Crestline, and Pittsburg; via Columbus and Cleveland; Detroit, via Cleveland and Steamer; Springfield. This train stops between Cincinnati and Columbus at Plainville, Milford, Loveland, Morrow, Spring Valley, Xenia and London.

THIRD TRAIN—Accommodation, at 4:40 P. M., for Columbus and Springfield.

FOURTH TRAIN—Night Express, at 11:30 P. M.; connects via Columbus, Bellair, and Benwood; Wheeling; via Columbus, Steubenville and Pittsburg; via Columbus, Crestline and Pittsburg; via Columbus and Cleveland. This train stops at Loveland, Morrow, Corwin, Xenia and London. *Sleeping Cars on this Train.*

No. 1 Express through to Cleveland without change.

The Night Express Train, leaving Cincinnati at 11:30 P. M., runs daily, except Saturdays. The other trains run daily, except Sundays.

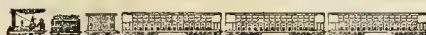
For all information and Through Tickets to Boston, New York, Philadelphia, Baltimore, Washington, Buffalo, Niagara Falls, Dunkirk, Cleveland, Pittsburg, Wheeling, and all Eastern places, please apply at the offices, Walnut Street House, No. 1 Burnet House, south-east corner of Broadway and Front Streets, and at the Eastern Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Superintendent.

Omnibuses call for passengers by leaving directions at the Ticket Office.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the West, South-West and North-West.

Fare to New York and Boston ONE DOLLAR less than via any other route.

TWO TRAINS

Leave Wheeling daily at 8:05 P. M., and 11:30 A. M.
Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.
Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2.

Quick time and sure connections.

Inquire for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

E. F. FULLER,

General Western Agent.

L. M. COLE,

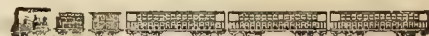
General Ticket Agent.

W. P. SMITH, Master Transportation.

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BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

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119 Walnut st., Odd Fellows' Building

CHICAGO,
Great Western and North-Western
ROUTE.INDIANAPOLIS & CINCINNATI
SHORT LINE

RAILROAD.

(VIA LAWRENCEBURG.)

Distance 110 Miles and No Change of Cars Between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS LEAVE CINCINNATI daily, (Sundays excepted,) from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6 A. M.—Chicago and Terre Haute Day Express—Through to Terre Haute, Lafayette, and Chicago, with but one change of cars.

SECOND TRAIN, 4:15 P. M.—Accommodation—The 4:15 P. M. train arrives in Indianapolis at 10:10 P. M.

THIRD TRAIN—Chicago and Terre Haute Night Express—8 P. M.—Arrives at Indianapolis at 1 A. M. This train runs through from Cincinnati to Chicago, with but one change of cars.

The above trains make close connections at

Indianapolis, Lafayette and Chicago,

WITH TRAINS FOR

Terre Haute,	Lafayette,
Springfield,	Jacksonville,
Rock Island,	Danville,
Galesburg,	Burlington,
Keosau,	Milwaukee,
Mattoon,	Pana,
Naples,	Peoria,
Galena,	Dunleith,
Quincy,	Racine,
Prairie du Chien,	Decatur,
Bloomington,	Joliet,
Lasalle,	St. Paul,

And all towns and cities in the North-west.

Connections are also made at Indianapolis with the Peru and Indianapolis Railroad for Kokomo, Peru, Logansport, Fort Wayne, Toledo and Detroit.

Be sure you are in the right Ticket Office before you purchase your ticket, and ask for tickets

Via Lawrenceburg & Indianapolis.

THROUGH TICKETS,

Good until used, may be had at the Company's Offices, north-west corner Broadway and Front Streets, under Spencer House.

No. 1 Burnet House, north-west corner Third and Vine Streets.

Also at the Walnut Street House.

J. S. SHACKELFORD, Ticket Agent.

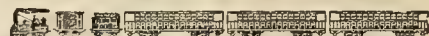
And at the Depot, where all necessary information can be had.

H. C. LORD, President.

W. H. L. NOBLE, General Ticket Agent.

Commencing May 22, 1859.

OHIO & MISSISSIPPI



RAILROAD.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCENNES, Cairo, and St. Louis, at 9:00 A. M., and 8:30 P. M.

Three Daily Trains for Louisville, at 9:00 A. M., 2:00 P. M., and 8:30 P. M.

One Train for Evansville at 8:30 P. E.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 8:30 P. M.

RETURNING.—FAIR LINE.—Leaves East St. Louis, (Sundays excepted) at 6:30 A. M., arriving at Cincinnati at 10:10 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 2:40 P. M., arriving at Cincinnati at 6:48 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the offices, Walnut Street House, bet. Sixth and Seventh Streets, No. 1 Burnet House, corner office; north-west corner of Front and Broadway; Spencer House Office; and at the Depot, corner of Front and Mill Streets.

W. H. CLEMENT, General Superintendent.

Omnibuses call for Passengers

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

SOLE IMPORTERS
PROSSER'S PATENT SURFACE CON-
DENSERS for high pressure steam, with sea or
other bad boiler water, gauges, 3-cutter drills, counter-
sinks, tube end cutting bars, expanders, tube sealers,
steel wire and whalebone brushes, pull lever wrenches,
tubes—plain or enameled, screwed together for Artesian
Wells, Hollow Slabs for various purposes, Steel for
Rollers.
27 Jan. THOS. PROSSER & SON,
28 Platt Street, New York.

G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

BUSH & LOBDELL,
Wilmington - - - - - Delaware
MANUFACTURERS OF

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AND

TIRES,
For R. R. Cars & Locomotive Engines,
ARE PREPARED TO

Execute Promptly Orders to any Extent
FOR THEIR

CELEBRATED WHEELS,
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WITH OR WITHOUT AXLES.

WHEELS FITTED
To Hammered or Rolled Axes.
In the best manner, at the shortest notice, and on the
Most Reasonable Terms.

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A Book for Every Business Man!
JUST PUBLISHED

—THE—

POST-OFFICE GUIDE!
For Post-Masters and Business Men.

CONTAINING

A Complete List of Post-Offices in the United States
and Territories, arranged by States and Counties; A
Complete List of all Distributing Post-Offices; Rates
of Foreign and Domestic Letter Postage; Rates of
Printed Matter, Transient and Regular; Abstract
of the Laws and Regulations of the Post-Office De-
partment, &c., &c.

COMPILED BY E. PENROSE JONES,
Late Assistant Post-Master at Cincinnati.

Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.

U. S. BLANK AGENCY, CINCINNATI POST-OFFICE, }
January, 1859. }

This work has been carefully compiled and corrected by
E. PENROSE JONES, Esq., late Assistant Post-Master of the
Cincinnati P. O., from the Records in this Department, and
other sources, and contains the most complete list of Post-
Offices, especially of the Western, North-Western, and
South-Western States, yet published.

MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an octavo pamphlet of about 100 pages.
The entire matter is kept standing in type, and as the com-
piler is promptly advised of all New Offices, Changes and
Regulations of the Department, the information is corrected
up to the last day of publication, an advantage possessed
by no other work of the kind.

Observe, That this list is arranged by States and Coun-
ties, making it especially valuable to business men. No
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are 3000 more offices in this than in any book heretofore
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Single copies sent by mail (postage prepaid) to any
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C. S. WILLIAMS,
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Mar 10 M.

WHEELER & WILSON'S



SEWIN & MACHINES.

WM. SUMNER & CO., cor. Fourth and Wal-
nut Streets, second floor, Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky. Columbus, O.
Lafayette, Ind. Dayton, O.
Indianapolis, Ind. Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with
important improvements, at a reduction on former prices;
and to meet the demand for a good, low-priced FAMILY
MACHINE, have introduced a new style, working upon the
same principle, and making the same stitch, though not so
highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALIKE ON
BOTH SIDES, impossible to ravel, and leaving no chain or
ridge on the under side, the economy of thread, and adap-
tability to the thickest or thinnest fabrics, have rendered this
the most successful and popular Family Sewing Machine
now made.

At our various offices we sell at New York prices, and
give instructions, free of charge, to enable purchasers to
sew ordinary seams, hem, fell, quilt, gather, bind, and
tuck, all on the same machine, and warrant it for three
years.

Send or call for a circular, containing all particu-
lars, prices, testimonials, etc.
WM. SUMNER & CO.
Feb 12.

1,200 Kegs No. 1 Railroad Spikes, 5 1/2 by 9-16th
Corby, Gossin & Co.'s make, for sale very
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TRABER & AUBERY,
7 Public Landing

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



terns, Stationary Fire Engines, Garden Engines and
all purposes where a Pump can be used. Also, for
forcing a large body of water to a great height or distance
rapidly.

Also, McGowan's Patent Ball Valve Pump, designed
for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings
Lead, Copper and Gas Pipe furnished at the lowest ma-
ket prices.

Full and perfect satisfaction guaranteed in all cases,
when properly put up according to directions.

Orders thanfully received and promptly filled at the
shortest notice.

SILVER MEDAL. (The highest prize) awarded
the McGowan's Compound Steam Pumping Engine at the
Ohio Mechanics' Institute. June 18, 1855—17

MOSELEY'S TUBULAR WROUGHT IRON



ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE
now been fully tested in this vicinity, and it is
universally conceded that they can not be excelled.
The Roofs, are wholly of Wrought Iron, or mixture of
Wood and Iron; Sheet piling always Iron.

The bridges are wholly Wrought Iron except the floor,
which is wood, like the floors of ordinary Bridges.

We are prepared to make these structures in any
quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per
foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs.
\$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100
square feet, part wood and part iron, from \$12 to \$20
per square.

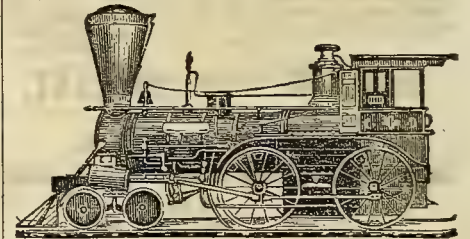
Increase of span of bridges, or width of buildings
makes an increase of price, but the increase in price is
no more than the increase of wooden structures.



We can furnish iron of every size to work into
Bridges and Roofs, and Railroads or other companies
buying the right to use them and the iron of us, can
make their own structures, one third less than the
above prices. Our structures weigh only from 1-4 to
1-10 that of wood; difference in freight in a long dis-
tance buys our work. In a few days we will have at
our factory, 497 West Third Street, in this city, four
different specimens of our Roofs, where the public can
inspect them to their satisfaction. We beg them to
give us a call, as all our work is warranted, and we ask
no pay on ordinary jobs until the work is done and ap-
proved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O.
may 13. MOSELEY & CO.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive
equal in efficiency and durability to the best Eastern
manufacture. Also, Shaping and Slotting Machines
suitable for railroad shops. Also, all kinds of heavy
forging and casting done at short notice. Also, bolts for
bridges cut with dispatch.
ap.20

MOORE & RICHARDSON.

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DIRECTED by a Board of Visitors appointed by the
State, is under the superintendence of **Col. E. W.
MORGAN**, a distinguished graduate of West Point,
and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges
but more extended in Mathematics, Mechanics, Ma-
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per half-yearly session, payable in advance.

Address the Superintendent, at "Military Institute,
Franklin Springs, Ky.," or the undersigned.

P. DUDLEY.

President of the Board.

Jan 5th.

The Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON.

CINCINNATI:

Thursday Morning, Aug. 11, 1859.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.

One square, single insertion,.....	\$1 00
“ “ per month,.....	3 00
“ “ six months,.....	12 00
“ “ per annum,.....	20 00
“ column, single insertion,.....	5 00
“ “ per month,.....	10 00
“ “ six months,.....	40 00
“ “ per annum,.....	80 00
“ page, single insertion,.....	15 00
“ “ per month,.....	25 00
“ “ six months,.....	110 00
“ “ per annum,.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

RAILROAD MURDERS.

Railroad murders in cold blood are becoming too frequent to allow them to pass without a word of caution at least. It is impossible for a business public to stop and investigate the condition of a road and its equipments before they start off on a trip of hurried business, and the only question that arises is how soon can the destination be reached—which is the quickest route? Reforms will never be reached through individual investigations, and because so investigated, public patronage will be withdrawn. The only true way to reach it is by the Courts inflicting heavy damages against the roads, and the constant caution of the press against roads that have the reputation of not either being in a safe condition or that have not a *practical* and liberal minded man as Superintendent. Such a man the Northern Road did not have. The Superintendent of this road is not an engineer or even a mechanic, and his proverbial nearness is such that a five cent piece would have to squeal three times before it could escape the iron grip of his lean fingers. The opinion expressed by the coroner's jury that the *Superintendent* and Directors should be held responsible is a correct one. We trust the Grand Jury will hold them to it.

WHAT DO AMERICAN RAILROADS REALLY PAY.

A great many broad assertions are made about our railroads, for which there is no other authority than current rumor. A great deal is said about them, which is only true in regard to half a dozen companies. This is evidently not the right mode of judging a system. We concede, at once, that railroads are not as profitable as many other kinds of business. But, all the assertions made about their bankruptcy, their not paying interest, their worthless stock, etc., are entirely based on the operations of some half dozen roads. It is not true of the railroad. So far from it, that many of these statements are positively ridiculous by their exaggerations. It is in this way that banks in times past have been abused. The failure of a few "Wild Cat" concerns, and the frauds of some Bank Officers are applied to all banks, and the world told they are worthless concerns; but, they have survived all this, and banks are now both popular and profitable. We assert that the entire system of railroads pay more interest to the stockholders, than is paid on commercial transactions in London and Amsterdam; and to Bondholders, double as much. We have stated this on general terms before; but, we will now endeavor to prove it, as nearly as such a thing is susceptible of proof. For this purpose, there is a good deal of authentic and undoubted evidence. For example, the States of New England and New York have obliged the Companies to make official reports, which have been critically examined, for series of years, and may be taken as correct. Then, we have the annual reports of nearly all the Companies. With these materials, we can make a very correct statement of the actual affairs of the running roads. Taken in States, excepting only those States which have few or no roads, we have the following results. We have taken it from different sources:

States.	Cost.	Net Receipts.	Profit.
Maine, New Hampshire and Vermont.....	\$57,280,000	\$1,392,000	4 per cent.
Massachusetts.....	73,500,000	4,600,000	5½ "
Connecticut and R. Island.....	40,000,000	2,270,000	5½ "
New York.....	144,700,000	9,435,943	6½ "
Pennsylvania and N. Jersey.....	131,250,000	8,510,000	6½ "
Virginia.....	33,500,000	1,101,000	3 "
N. and South Carolina.....	29,000,000	1,500,000	5 "
Georgia.....	21,500,000	2,360,000	11 "
Alabama, Mississippi and Louisiana.....	25,000,000	915,000	3½ "
Ohio.....	154,700,000	5,204,582	3½ "
Indiana.....	58,000,000	2,840,000	5 "
Illinois.....	68,000,000	4,359,000	6 "
Michigan and Wisconsin.....	28,000,000	—	—
Maryland.....	29,000,000	2,118,000	7 "
Kentucky and Tennessee.....	23,500,000	1,050,000	5 "
Aggregate.....	\$916,935,000	\$47,658,528	5 per cent.

There are no doubt errors in this. But it is sufficiently near for a general view. The errors are all against the roads and not in their favor. For example, in Virginia, Tennessee, Kentucky, and Louisiana, the roads are, many of them, unfinished. The table,

therefore, includes a great deal of *cost*, on roads not running. In Ohio, are included large portions of roads running into Indiana and Pennsylvania. The Ohio roads taken alone would present a better result. The corrections, therefore, would result in giving a more favorable view. Several of the new States are also excluded; for, in them there are no roads which may be said to be fairly in operation. There is an absolute certainty, that the future must present better results than these. But, from the general table we gather these facts.

1. That railroads, whose aggregate capital cost exceeds *nine hundred millions of dollars*, the net income is *forty-seven millions*; or, about 5½ per cent.

2. That, as the rate of interest in the Bank of England is 2½ per cent., and at Amsterdam 3 per cent., that the *net* income of American roads is at this moment nearly double, what European Banks are willing to take for their money.

3. That the reason why Stockholders of railroads do not enjoy this income is, that having *borrowed half their capital at high interest*, the income of the roads *go to the Bondholders*, in most cases. For example, the Roads of Indiana have a *net income* of \$2,840,000; but these roads have borrowed \$33,000,000 at 7 per cent. interest. They must, therefore, pay \$2,210,000 to the Bondholders, and have but \$530,000 for themselves, which is only 1 per cent on the Stock.

On this state of things, these practical comments may be made:

1. A sagacious man *after the fact* (of which the world has great numbers,) may say, "Well, you should not have borrowed money, at this interest. You know going in debt was a bad thing." Certainly; but it must be borne in mind, that the roads would *never have been made without borrowing*; and it will be admitted, at once, that many of the Stockholders and Directors went into these debts, knowing this, and willing to run the risk. For, they truly said, the road *must be made*.

2. It is also true, that many of the Stockholders did not expect to get anything for the stock for years, if ever. They calculated on *incidental advantages*, and, generally, they received them. For example; there are three classes of persons, whose direct benefit, in most instances, was greater, than the whole amount of Stock, they owned. 1. There is the class of land owners, *on the line of the road*. Nine out of ten of these received much greater advantage from the construction of the road, than they paid in Stock. We have an absolute test of this, is the prices of land sold, on the Illinois Central Road. The average price of Government sales, of the very best lands, is not over \$1 50 per acre; while the average sales of the alternate sections on the Illinois Railroad is full \$11 00 per acre. Nearly \$10 00 per acre, was the real value added to the value of lands by the construction of the

Central Road. But, the increase on improved land in Ohio, Indiana, etc., is greater than this, because these lands already have produce to carry off, which could not be carried off, without the Roads. Two hundred acres of land, then, within five miles of Railroad, have been benefitted to the amount of full \$2,000 by the road, and that is more than most of the land owners have subscribed.

2. Another class is that of merchants, millers, manufacturers, etc., etc., of large towns. Many of these persons actually think, they have some how been wronged, by the loss of Stock in Roads; but how? It is an unquestionable fact, that the business and profits of this class of persons have been extended much beyond the amount of Stock subscribed to Railroads. This class are sharp and shrewd. They never subscribe to railroads without expecting to make a corresponding profit. In a case here and there, there may have been loss; but, generally, the commercial community has made much more than it ever lost by railroads. 3. Another, and large class of stockholders, are contractors, sub-contractors, and brokers. Have they lost? Not a whit. They are the people who have made most by roads. They subscribed nothing (however large nominally,) which they could not afford to lose. But, they did not lose it. A. paid B. with stock 20 per cent. discount. B. paid C. ditto; and C. paid D. In this way the loss was divided so that the actual loss of stock to A., B., C. and D. was not more than a fourth of their actual profits.

The number of *bono fide* losers by railroad stock in this country is small. Four-fifths of the railroad stock was in the hands of men, who made their profits in other ways. The truth is, and is not to be disguised, that *two-thirds* the real cost of railroads in this country was paid *by borrowed money*. A great deal of the actual *subscribed stock*, such as that of cities, towns, counties, and States, was paid in Bonds of debt; a great deal of the remainder was paid in work, material, and profits. We affirm, then, as the conclusion of this investigation:

1. That the entire railroad system of this country *has earned in net profits, a larger per cent., than the rate of interest paid in the commercial cities of Europe.*

2. That the loss on Railroad Stock *is much less than it is generally supposed to be, and has fallen on those who can afford to bear it.*

THE CINCINNATI STREET RAILROAD COMPANIES.—Four of the Street Railroad Companies have executed their contracts with the city as required by the ordinance. Wilson & Co. have not as yet accepted their route. The ten days within which the contracts were to be signed expired yesterday. It will be remembered that but five routes in all were authorized. Two of the companies have already advertised for proposals for building their roads.

NEW YORK AND ERIE R. R.

Just at the present time any thing about this road must be of interest to our readers. The New York *Herald* of Monday has an article containing many interesting facts and figures which we condense below. The position of the Company at the present time is as follows:

	Nominal value.	Market value.
Stock.....	\$11,000,000	\$ 550,000
First Mortgage.....	3,000,000	2,400,000
Second Mortgage.....	4,000,000	3,000,000
Third Mortgage.....	6,000,000	4,000,000
Fourth Mortgage.....	4,500,000	1,600,000
Fifth Mortgage.....	100,000	20,000
Convertible of 1871.....	3,423,100	570,500
Convertible of 1862.....	3,000,000	500,000
Sinking fund bonds of 1875..	3,925,000	634,000
Total.....	\$38,748,000	\$13,294,500

This is exclusive of about \$1,000,000 of floating debt, and some \$200,000 of overdue coupons.

At the present time, therefore, the owners of the Erie Railroad could not sell out their respective interests for over \$13,294,400. That the road, however, can, under any circumstances, earn the interest on fully twenty millions of dollars, is admitted by railroad men; in other words, the property is, in the judgment of practical persons, worth seven millions more than it is selling for.

To force matters to an issue, and the property to a sale, under the foreclosure, at the present time, would evidently wipe out the claims of the stockholders and unsecured bondholders; it might deprive some of the later mortgage bondholders of a part of their claims. So far as these parties are concerned, therefore, their interest is adverse to a forced liquidation. On the other hand, the mortgage bondholders, whose claims both for principal and interest may be considered safe, can not expect to enforce them against the will of the later creditors and the stockholders without a litigation which is sure to be protracted and expensive. It is evidently better for them to sacrifice something rather than to involve themselves in a lawsuit with parties who are in possession of the disputed property; and who obviously will not submit to lose the whole without a struggle. The question appears to be—can any compromise be devised which shall take so little from the mortgage bondholders that they will be willing to agree to it, and yet which shall give so much to the stockholders and later creditors that they may be willing to lend their aid in carrying it out?

THE LATE RAILROAD DISASTER.—ALBANY, Friday, August 5, 1859.—The Albany Coroner's Jury in the Schaghticoke bridge slaughter returned a verdict this afternoon, that the timbers of the bridge were rotten, unsafe and known to be so, and that the Superintendent and Directors should be held responsible.

The graduation and masonry of the Tyrone and Lock Haven Railroad is nearly completed.

RAILROAD MISCELLANY.

—The New York and Erie Railroad has gone into the hands of a Receiver even sooner than we predicted. Mr. Nathaniel Marsh, at present Secretary, has been appointed Receiver by Judge Mitchell, at the unanimous request of the Trustees, of the Mortgage Bonds, and of a large number of the unsecured Bondholders. As soon as Mr. Marsh shall have executed the necessary bonds to the Court, he will pass into full possession of the road. We presume that Mr. Moran will now retire to private life—a position he should never have left for the management of a railroad.

—Earnings of the Ohio and Mississippi Railroad Company for the month of July, 1859, are:

Passengers.....	\$70,304 40
Freights.....	25,283 90
Express.....	3 172 50
Mail.....	6,633 33

Total..... \$113,574 13

Earnings of Eastern Division, in

July, 1859.....	\$69 702 09
July, 1858.....	62,005 79

Increase..... \$7,699 20

—The earnings of the New York Central Road, during the month of July, were nearly \$53,000 in excess of last year. The six months dividend of 3 per cent. amounts to \$620,000, after the payment of which there will be a balance of over \$14,000 on hand.

—The movement of freight on the Central Ohio and Little Miami Lines at this time is very strong. On Tuesday ninety-five loaded cars came into Columbus from Bellaire for the Ohio and Mississippi Road; on the day before yesterday the Little Miami brought down one hundred and twenty, and on Tuesday one hundred and forty cars for St. Louis. The business of the Central Ohio will exhibit very large gains this month.

—Full details of business for Erie Railroad for six months of fiscal year, ending March 31st, 1859, show nearly all the loss on the receipts to have been on freight, and savings in transportation expenses greater than falling off in traffic, so that net earnings are greater by \$38,000 than in corresponding months of last year.

—Sixty-four railroad trains arrive or depart from Indianapolis daily. Each road runs one freight train every day, except the Lafayette, which runs but three per week.

—A meeting of the Stockholders of the Peru and Indianapolis Railroad has been called for the 13th of September, to elect nine Directors of the Company.

—The Detroit and Milwaukee Railroad Company are constructing a pier at Grand Haven which will be thirty-three thousand feet in length, and cost upwards of two hundred and twenty-five thousand dollars.

—The Buffalo *Commercial* predicts that the recent legal proceedings in regard to the New York and Erie Railroad will result in "wiping out all except the first four mortgages."

derable value, are too small for a locomotive of the class required. I would recommend the purchase of a new one this fall, which will increase the expenditures in this department, during the year, some three or four thousand dollars.

REPAIRS OF RAILS.—The Louisville road has expended \$7,204 80 in the purchase of new rails, re-rolling, and repairing old rails.

The Lexington Road has expended a comparatively small amount for rails the past year. The iron of their road, besides being better iron originally, was laid upon an old consolidated road bed, having been macadamized some years previously. Both roads will require rails during the coming year, but no great increase of expense will be incurred.

CROSS TIES.—The cross ties, which were originally of locust, have been in place in the Louisville road an average of nine years, and those of the Lexington road ten years. The two roads require now, for renewal from ten to fifteen thousand ties. Those that are in the track are round, too small, and poorly adapted to serve the purpose of a tie laid in ballast. The old sill upon which they were laid in the Louisville road is entirely decayed, and ballast is sadly needed to preserve the iron and the rolling stock. I would recommend that 15 to 20 miles per year of the track be relaid with well proportioned ties. Should this be done a sufficient number of good ties for repairs could be had of those taken out of the track. The Louisville road has relaid five miles of track with new ties, and consumed altogether about 13,000 ties. The Lexington road has used about 1,600 ties.

REPAIRS OF CARS.—The stock of cars remain the same as last year, the renewals being sufficient to cover the depreciation for the year, with a reduction of several thousand dollars from last year's expenditure.

BALLAST.—Five miles of track on the Louisville road have been relaid with new ties and partially ballasted. On the Lexington road, besides the ordinary ballasting, authority was granted to widen the road bed, thereby better facilitating the drainage, and at the same time providing materials for thoroughly ballasting the road with stone taken from the cuts. A contract was concluded for widening the road from Lexington to Yarnallton, seven miles, and for distributing and preparing the rock for ballasting, which will be completed by first of September or October. Should the road be improved in the manner contemplated in the widening of this portion of the Lexington road, no road in the country could be operated more economically, and at the same time more satisfactorily to its patrons.

REPAIRS OF BUILDINGS.—A new roof has been put on the round house and the locomotive repair shop, and ordinary repairs have been made to other buildings of both roads.

WATER STATIONS.—The Bagdad water station has been completed, and other current repairs have been made in the buildings, pumps, etc. A new horse power, pumps, and house to protect them have been erected at Lexington. Should the dry weather continue very long, one will have to be provided at Big Spring, or some point near there.

BRIDGES.—The bridges upon the Louisville road have been covered with tin and iron, sided up, and the trusses thoroughly coated with a mixture of salt, lime, and borax.

The annual net earnings of the two roads are sufficient to pay a six per cent. dividend upon the stock, the interest upon the debt, provide a sinking fund to meet the debt at maturity, and leave a surplus of from 25,000 to 40,000 dollars. I would recommend to the

Board that this balance should be expended in ballasting, relaying ties, improving the drainage, and erecting permanent and convenient station houses at all the important stations. I am firmly persuaded that besides contributing very largely to the comfort of the patrons of the road, and thereby encouraging business, it will pay the stockholders in diminished expenses of operation.

Whilst the road has not been entirely free from accidents during the last year, no passenger has been injured. In November last a freight train was thrown from the track by an obstruction placed in a cattle guard, in which two attendants with stock were slightly injured, 25 or 30 hogs killed and wounded, and the locomotives and cars seriously injured. A negro man engaged on repairs of track was killed by a collision between a hand car and wood train, and another repair hand fell from a car on the ballast train whilst coupling the cars and was killed.

For further information, the attention of the Board is called to the accompanying statistical tables. Respectfully,

SAMUEL GILL, *Superintendent.*

BALANCE SHEET.

To Construction Account.....	\$1,379,344 61
L. & F. and L. & F. R. R. Companies amount of Stock in possession of Joint Roads.....	192,750 06
Stock in Louis. & Nash. R. R.....	1,502,694 61
Bagdad Turnpike Co.....	1,540 00
Emmence Turnpike Co.....	2,000 00
Real Estate.....	3,000 00
L. & F. and L. & F. R. R. Co. amount Materials in possession of Joint Roads..	39,066 64
Bills Receivable.....	26,820 41
Cash.....	23,639 51
Ballast Account, (Materials on hand).....	1,078 83
Repairs of Road, ".....	3,319 35
W. S., ".....	1,340 04
Cross Ties, ".....	1,380 70
Repairs of Rails, (Iron on hand).....	3,254 84
Bank of America, N. Y., amt. on Deposit to meet Int.....	6,463 19
Total.....	7,890 46
By State of Kentucky.....	\$1,623,088 58
Capital Stock.....	\$74,519 50
Stock to be issued for Interest and Dividends.....	\$736,350 00
City of Louisville Bonds.....	4,519 40
Railroad.....	741,069 40
Cash Dividends unclaimed.....	174,400 00
Bills Payable (Balance due for Depot Grounds).....	248,000 00
Profit and Loss.....	583 36
Total.....	8,096 87
	376,817 45
Total.....	\$1,623,088 58

RECEIPTS.

Passage.....	\$132,607 70
Freight.....	128,883 57
Mail Service.....	6,193 68
Rents.....	317 49
Bridge Tolls.....	44 75
Total.....	\$268,046 19

EXPENDITURES.

Expense Incidental.....	\$ 907 31
Expense Transportation.....	1,620 01
Oil Account.....	3,081 54
Wages Account.....	33,356 46
Fuel Account.....	15,106 70
Ballast Account.....	3,831 40
Damage Account.....	1,579 46
Tax Account.....	1,326 98
Repairs of Hand and B. Cars.....	1,444 80
" Bridges.....	4,771 89
" Road.....	26,093 32
" Water Stations.....	1,058 87
" Cars.....	13,543 36
" Rails.....	7,204 80
" Cattle Pens.....	660 36
" Buildings.....	3,908 61
" Locomotives.....	13,360 74
Bagdad Water Station.....	1,096 39
Damage to Stock.....	1,085 26
Court and Lawyers' Fees.....	387 21
Water Supply.....	1,387 11
Cross Ties.....	4,875 08
Stationery and Printing.....	1,022 01
Advertising.....	330 51
Office and Station Furniture.....	369 59
Division House on Benson.....	487 54
Smithfield Depot Grounds.....	200 00
Total.....	\$154,101 31

\$113,948 88

The following are the officers of the Louisville and Frankfort Railroad Co.:

Edward D. Hobbs, *President*; Robert G. Courtenay, T. T. Shreve, Edward D. Hobbs, Robert C. Hewitt, Thornton Merriwether, J. W. Kalfus, *Directors*; Sam'l. Gill, *Sup't*; T. W. Spilman, *Sec'y and Treasurer*.

Officers of the Lexington and Frankfort Railroad Co., are:

Edward D. Hobbs, *President*; Benj. Gratz, M. C. Johnson, F. K. Hunt, P. Swigert, W. A. Dudley, Joel Higgins, *Directors*; Sam'l. Gill, *Sup't*; E. S. Duncanson, *Secretary*.

CHICAGO, BURLINGTON & QUINCY RAILROAD.

The road and appurtenances owned and occupied by the company, are as follows:

That part of the Galena and Chicago Union Railroad from Chicago to the Junction is occupied for the passage of our trains and business under a lease from that company, being in length.....	30 miles.
The road of this company now built commences at the Junction, and extends to Galesburg, a distance of.....	138 "
The Peoria and Oquawka railroad from Galesburg to Burlington is operated under a lease from that company, and is in length.....	42 "

Making a total length of line from Chicago to Burlington.....210 "

This company owns about twelve acres of depot grounds, in the city of Chicago, on the South Branch of the Chicago river; also, one-fourth interest in the Union track, which connects the several railroads in Chicago, with some valuable lands, (necessarily purchased, in securing lands for that track,) which are in part, used for depot purposes by the several owners thereof. The passenger, and a portion of the freight business, at Chicago, is transacted at the depot of the Illinois Central Railroad Company, under a lease or an agreement with that company.

This company own large and ample depot grounds, and the necessary station buildings, at East Burlington, which are used for the business of the line.

The aggregate amount charged as cost of road, equipment and appendages, remains the same as at the date of the annual report of last year, and is.....\$7,468,925 92

Advances to the road is.....60,158 49

Total amount of construction accounts, including advances to other roads.....8,149,084 41

The capital stock of the company remains the same as at the date of the last report.....\$4,631,540

Less 22 shares, reported as held by the Company.....2,200

Total stock.....\$4,629,340

The Funded debt, May 1, 1859, was.....2,990,000

Total stocks and bonds.....\$7,619,340

The funded debt has been reduced the past year, by the purchase and canceling of bonds for the sinking fund, to the amount of \$63,000. And, in the aggregate, to the present time, it has been reduced \$168,000. The preceding statements show an excess of investments for construction account and for advances for connecting roads, over capital stock and funded debt, amounting to \$529,744 41.

The income for the year ending April 30th, 1859, embracing earnings on 138 miles of road owned by the company, and our portion of earnings upon the 30 miles of road leased of the Galena and Chicago Union Railroad Company has been:

For transportation of freight.....	\$689,737 53
" " " passengers.....	333,391 47
" " " mails and miscellaneous..	21,444 63

Total earnings.....\$1,044,573 63

Balance to credit of interest and exchange account.....52,983 04

Total income.....\$1,097,556 67

The expenditures chargeable to Income Account, for the same time.....872,938 70

Balance of income for fiscal year	\$224,597 97
Add balance of May 1, 1858.....	388,963 80
Total to May 1, 1859.....	\$613,561 77
Deducting from the above the amount charged to Improvement account the past year.....	68,325 26
Leaves an actual surplus of.....	\$545,236 51
If from this balance be taken the amount paid for 168 sinking fund bonds, purchased and canceled up to May 1, 1859, at a cost of.....	147,659 44
There will remain a net surplus of.....	\$397,577 07
The Treasurer's report shows that the amount of bills and accounts receivable, including the amount due from agents and connecting roads is.....	103,069 65
The deposits in New York and Boston, and cash in the Treasury, are.....	84,062 12
Total of cash assets.....	\$187,071 77
The value of materials on hand for the use of the operating department, is.....	141,366 16
Cost of boats for ferries at Burlington and Quincy.....	20,479 32
Total assets.....	\$348,917 25
The amount of bills payable on the 1st of May, was.....	\$296,459 54
Unclaimed dividends, accounts, and pay-rolls.....	13,908 12
Due agents and connecting roads.....	23,057 49
Total liabilities.....	\$333,425 15
Balance of assets.....	\$15,492 10

The expenditures for improvement account the past year, although such as are usually charged to construction account, have been made a charge upon income account, believing that thereby the interest of stockholders will be better subserved than by increasing the capital account for such purposes. The following statement will show some of the reasons for, and the cost of the several expenditures charged to that account:

In the spring of 1857, it was supposed that an additional number of locomotive engines would be required in order to the accommodation of the business of the road the ensuing autumn, and, to provide for such business, an agreement was made with the Detroit Locomotive works for the manufacture and delivery of four coal burning locomotives, at a specified date. That company failed to complete and deliver them at the time agreed upon. When subsequently completed and offered to this company, their use not then being required, we refused to receive them. Upon a full investigation, however, of the subject, during the past year, there appeared equities in the case that demanded a compromise, and it was accordingly decided to receive them at a reduced price agreed upon, and they were purchased for \$38,000.

A large amount of expense has annually been incurred in maintaining that part of the track between Mendota and Galesburg, a distance of eighty miles, for the reason that no material suitable for ballasting had been found in quantities sufficiently large near the line of the road to be available, and very little of that kind of work had been done. A gravel bed was discovered, last fall, near the line, about mid-way of this section of the road, which has been purchased, and from which a considerable portion of the track has been ballasted, the remainder is now being done. The amount expended for this purpose has been \$19,559 94.

The engine house at Aurora has been extended, so as to accommodate eight more engines, at a cost of \$5,672 97.

Two passenger cars have been altered and fitted up for sleeping cars. Some improvements have been made in the passenger house at Galesburg, which, with some other small improvements, amount to \$5,092 35.

This company, with other owners in interest of the Union Track, in Chicago, together with the Michigan Southern and Northern Indiana Railroad Company, have purchased the lands

necessary to make a permanent business connection with that road where the Union Track crosses it. The amount that it will be necessary for this company to contribute (after disposing of some of the lands necessarily bought, but not required for the tracks,) will be about three thousand dollars; eighteen hundred of which has been paid and charged to Union Track account.

The revenue of the company has been much less the past year than the Directors had expected, or could have anticipated. The causes that have produced these results are too well understood to require particular notice. It will be sufficient to say that the section of country traversed by your line of road, and that tributary to it, has suffered quite as severely, the past two years, from the failure of the staple articles of production, as any other portion of this or the adjoining States. The earnings of this, compared with last year, show a falling off of thirty per cent. Twenty-four per cent. of this is on freight, and six per cent. on passenger earnings. The falling off of freight earnings was comparatively greater than those of passengers, being thirty-six per cent. on the former, and twenty-three per cent. on the latter. In the item of wheat and flour, the falling off has been forty-five per cent., or equal to one million six hundred and fifty-six thousand bushels—in that of corn it has been twenty-eight per cent., or five hundred and seventy-seven thousand bushels. The amount of lumber transported was about one-half as much as that of the previous year, being a reduction of thirty-five millions of feet.

The preceding statements will show satisfactory reasons for the diminished earnings of the past year. Any one acquainted with the fertility of the country tributary to our line of road, and the vast business that must pass over it in years of ordinary production and progress, will know that the present depression in the business and earnings of the road can only be transitory, and that a moderate return of prosperity to the country tributary to it, must show again its large productiveness to the stockholders.

Efforts have been made the past year to reduce the expenses of operating the road comparative with the falling off of receipts, but it has been found impracticable to entirely accomplish this result. The heavy rains of the early summer increased materially the cost of keeping the road in order for several months, and added much to the cost of equipment repairs. That part of the road thus affected, has since been graveled, and will not be subject to like expenditures in the future. The operating expenses the past year have been fifty-one and seventy-nine one hundredths per cent., while those of the previous year were forty-six and thirteen one-hundredths per cent. An increased per centage of expenses must necessarily accompany any large falling off in earnings on all well managed roads. The road and equipment has been kept in good repair and condition, and, with the improvements made the past year, is now more valuable, and in better condition to accommodate a large traffic than at any former period.

The accounts kept the past year of the performance of wood and coal burning locomotive engines, and the fuel consumed, show a saving in expense for fuel in favor of the coal burning engines, of about forty-seven per cent.—The average cost per mile run of freight engines, using wood for fuel, was nineteen and seven one hundredths cents per mile; while the cost of running engines with coal for the same service, was ten and sixteen one-hundredths cents, showing a total saving in expense for fuel on 303,496 miles run by freight

engines, with coal, of \$27,039 08. From this there is some deduction, probably, to be made for the increased cost of repairs on coal engines, the amount of which has not been fully determined.

Besides the four coal burning engines purchased the past year, six have been changed in re-building from wood to coal, making, with those previously in use, twenty-five exclusively coal burning engines now in service.

In order to the proper transaction of our ferry business at Burlington, it became necessary to provide a ferry boat of our own, or have one that could be put in the service on short notice; accordingly a suitable boat was purchased for this business. Subsequently, satisfactory arrangements were made with the ferry company for doing the ferrying of the line at that place for another year.

Efforts were made to charter a suitable boat, at a fair rate, to transact the business of our line between Quincy and Hannibal, in connection with the Hannibal and St. Joseph Railroad, on the opening of that road for business, but without success. It then became necessary for our company to purchase a boat and place in that service, in order to secure the benefits of a proper connection with that road. The Burlington ferry boat was used in that trade until a more suitable boat was obtained, and its use has been continued, as occasion required, in the freighting business of the line. These boats cost about ten thousand dollars each, or, in the aggregate, \$20,479 32. Satisfactory arrangements have been made with the other parties composing portions of the line, that will insure fair returns upon the investment.

The negotiations in progress at the time of making the last annual report, for the purchase of that part of the Peoria and Oquawka Railroad west of Galesburg, have not resulted in the purchase of that road, for the reason that the parties in interest could not make a good and sufficient title to the property. This company have continued to operate that part of the road under the lease and agreement previously made with that company. Its operation has been attended with a very large expense, owing to the frailty of its structure, want of fencing, and the incomplete condition of the road, especially that part which crosses the marsh or low bottom lands east of Burlington, the track being so low as to be subject to inundation and washing away, on every considerable rise of water in the Mississippi river. These expenditures, with the interruption of business and loss of revenue attending it, will continue until the road is placed in proper order and condition, and beyond the reach of the floods of that river. In the present embarrassed state of that company, and the incomplete condition of that road for the purpose of business and revenue, the directors can see now no other way of obtaining repayment of their advances to that company, but to sell the securities pledged, and thereby enforce their payments. Action in this behalf has been delayed in the hope that some satisfactory arrangement would be made for their payment or satisfaction without resort to these measures.

The notice given by the Galena and Chicago Union Railroad Company for the termination of the amended contract, for the use of their road, from Chicago to the Junction, having been withdrawn, that contract will remain in force for two years longer, or until the first of May, 1861. This having been done, it was not deemed necessary or expedient to take any steps the past year initiatory to the building of an independent line into Chicago, or changing our present relations with that com

pany. The committee appointed by the stockholders, at the last annual meeting, to investigate and present these interests for their consideration, coinciding in this opinion, have deferred attention to this subject. It will be necessary, however, at some time during the present year, to decide upon the policy to be pursued, in order that there may be sufficient time to carry out the views of stockholders before the expiration of the present contract with that company.

The directors have become convinced that, under the embarrassments that continue to surround the Quincy and Chicago Railroad Company, they will not be able to meet their original engagements with this company for the repayment of advances made on their account. The last advances were made with the hope and expectation that some satisfactory arrangement would be made with the Trustees, under the sanction of the bondholders of that road, for compromising and settling the issues that have grown out of the failure of that company to reimburse the sums advanced. The terms of adjustment that were offered by the stockholders, at their meeting in New York, have been approved by the Trustees, and placed before the bondholders of that company for their sanction. If they are fully advised as to the present condition and future prospects of that road, they will, undoubtedly, accept of the proposed compromise.

JOHN VAN NORTWICK, *President.*

WABASH VALLEY R. R.

OFFICE TOLEDO & WABASH RAILROAD CO.,
No. 35 Exchange Place,
New York, July 27, 1859.

The semi-annual interest on the First Mortgage Bonds of this Company, accruing on the 1st proximo, will not be paid on maturity, the company asking a temporary indulgence therefor for a period of three or four months. The annexed exhibit indicates the gross earnings of the road during the twelve months ending June 30, viz:

July.....	\$75,866 48
August.....	112,341 87
September.....	103,491 14
October.....	96,063 57
November.....	63,517 39
December.....	41,503 46
January.....	39,052 10
February.....	39,750 88
March.....	61,724 34
April.....	68,910 26
May.....	60,068 24
June.....	52,481 22
Total.....	\$820,778 96
Actual operating expenses for the same period.....	406,250 56
Balance.....	\$414,528 40
One year's interest on the entire bonds of the company is, to wit:	
First Mortgage.....	\$3,400,000.....232,000
Second ".....	2,500,000.....175,000
	413,000 00
Balance.....	\$1,528 40

From the foregoing statement it appears that notwithstanding the pervading stagnation of business, and stringency of money affairs at the West, coupled with three successive seasons of short crops, the revenues derived from the road have proved amply sufficient to defray all operating expenses, and also to meet the entire interest on the bonded indebtedness of the company. It may, therefore, be regarded as demonstrated that a degree of material and financial strength and capacity inheres in the road, sufficient not only to prove it to be self-sustaining, but rewarding and remunerative to its owners, and that, too, under the usual disadvantages above mentioned.

The present inability of the company to promptly meet the August dividend of interest arises from the necessity of employing the means usually applicable thereto, to other and indispensable objects. During the past year, it was found essential to the successful operation of the road, to increase its equipment of power and rolling machinery. Accordingly, locomotives and cars were purchased to the extent of \$115,000; within the same period, expenditures of some \$45,000 were made in graveling and fencing the road, and building grain warehouses, and superadded thereto were expenses of \$25,000, incident to carrying to successful consummation the recent compromise arrangement entered into between the various classes of creditors of the company. The extraordinary damages sustained by reason of the great freshet of last season, by which the company lost one of its largest bridges, besides numerous culverts and other extensive structures, required an outlay of \$40,000, to restore the road to its original usefulness. These large expenditures, not likely to occur again, aggregating \$225,000, were made directly from the monthly earnings of the road, and indicate the occasion of the temporary indulgence now sought of the first bondholders.

The present and future prospects of the road were never more hopeful and encouraging. A very large crop of wheat, of unusually excellent quality, has been recently harvested throughout the Wabash Valley, and the yield of corn promises to be very abundant.—Other elements of advantage and prosperity will soon be secured by the completion and opening of two important lines of tributary railroads. The Logansport, Peoria and Burlington Railroad is in a forward state, the iron and superstructure is now being laid, and it is expected that it will be ready for the passage of trains early in November next. The completion of this great trunk line gives the shortest and most practicable route from Burlington and Central Iowa, to all eastern States, and will draw a vast traffic upon the road of this company, from one of the most extensive and richest sections of country in the West. During the present season, the Quincy and Palmyra Railroad will be in successful operation, thus filling up the only remaining link of rail communication to St. Joseph, Missouri. The completion of these great works, combined with the large incoming crops, and unmistakable indications of a general revival of business at the West, furnish substantial grounds for confidence in the future success of the road, and the belief that the interest now deferred will be promptly met at the date heretofore named. Those parties holding coupons maturing on the first prox. will be allowed interest for the period thereafter held.

A. BOOBY, *President.*

HORRORS IN PROSPECT.

The recent slaughter on the Michigan Southern Railroad appears to have been caused by a fault of construction. To save money, the culvert was made too small to discharge the volume of water collected in the gorge above the embankment. Old settlers in the vicinity, who had witnessed the sudden rising of the waters on former occasions, warned the parties interested—those who were making the culvert and those who managed the road—that the former was too small. But the warning was disregarded; the very event which the old settlers predicted, took place, and a hundred confiding passengers were, in one moment,

mashed up into a jelly. Now, suppose that, instead of the warning having been given to the managers, it had been given to the public at large, would they have heeded the warning and avoided the road? Let us take a case in point.

In February last, the new road from Hannibal, on the Mississippi, to St. Joseph, on the Missouri, was opened for travel. The usual parade and flourish was made—speeches, dinners and compliments to the managers. But what are the facts in relation to this road? In June of last year, three gentlemen, composing the Board of Public Works, visited the road at the Governor's request, for the purpose of examining its construction, and of ascertaining whether any portion, embracing as many as twenty consecutive miles, was completed.—Congress had granted lands in aid of railroads; and for the State of Missouri to acquire the right to sell these lands, the Governor must certify, to the Secretary of the Interior, that twenty miles of railroad had been completed, whereupon the State might sell a hundred and twenty sections of land. These gentlemen appear to have been impressed with the responsibility of the duty imposed on them, as shown in their report to the Governor, published in the Annual Report of the Board to the last Legislature. The act of Congress gave so much land for every twenty miles of completed road, and on this word the question turned.—They examined sixty miles of the road from Hannibal, which they say is not completed, but that much of the work is far below the standard of a completed road, though the contract with the builders, bound them to make the said railroad one of the first-class railroads in the United States. There were also wholesale changes in the grade of these sixty miles; the bridges are structures perishable in a few years; that over South River, 1,300 feet long, is defective in mechanical execution, the stone foundations to support the wooden sills are evidently insecure; stones dropping out have left a large gap in the wall, and at another place, where one is gone, the vacancy has been imprudently supplied with a block of wood. The south end of the bridge rests on wooden piles driven into, but not through, a loose bank of earth made for the road. These piles and the bank have sunk together. The mechanical work is bad, the timbers too small, and as a whole, the structure is pronounced "a dangerous one." So much for the first twenty miles from Hannibal.

On the second twenty miles, the masonry of the culverts and bridges was, in many cases, of a very inferior kind, and, in several instances, not at all answering the purpose for which it was intended. In two instances the masonry of open ways left for the passage of water, some twelve or fourteen feet span, the walls reaching clear up to the superstructure, have proved so defective that they are kept from falling in by braces of timber shoving them apart. The walls of this murder trap are actually leaning in and toward each other. Stone culverts were built of very small stones, without mortar or cement, and so loosely laid up, that the water has washed out the earth behind the walls. Other culverts have imperfect foundations. Salt River bridge has a very defective abutment, while both of them are badly cracked, arising from imperfections in the foundations. The whole twenty miles are condemned as being far below the standard of a completed road. On the third twenty miles the work is no better, and the trestle work is declared to be dangerous for the passage of trains at the present time. This road is 206 miles long, and expects this year to have a

rolling stock of 27 locomotives, 25 passenger cars, and 400 freight cars. Up to last November, it had received, from stock subscriptions, \$1,083,000, from the State, in bonds, \$3,000,000, and for mortgage bonds, \$3,550,000, or a total, including smaller items, of \$7,639,705. What a capital to be invested in a work pronounced so wholly defective and perishable!

But look at the more important question of human life. The vast emigration to Pike's Peak traveled over this pit fall road, and those who return thence, must, necessarily, repeat the journey. It is probable that not one of them has the least idea of the peril he has thus far escaped. The dangers are more numerous and imminent than on the Michigan Southern. There it seems to have been a solitary disregard of common sense, but here the traps deliberately set to crush the human body into a shapeless mass, occur every few miles. How characteristic this exposition is of the wanton disregard of life and property which prevails among us. Somebody in the management of this road must know that every train that rolls over it, does so with no guaranty against a frightful massacre. If sin, therefore, comes by knowledge of the law, how are railroad managers to be held as free from criminal carelessness, for which the utmost vengeance of the law ought to be invoked, who daily send off trains of confiding passengers with every chance against them of being plunged through some cheat of a bridge into the death valley under it? The telegraph may bring us, at any moment, a dispatch announcing some crash on the Hannibal and St. Joseph road, as harrowing as that at South Bend. There the poor victims had no previous warning of the danger, but here they have. Will those who may be the victims give heed to the danger of a trip thus set before them from the legislative records of the State?—*New York Tribune*.

IMPORTANT RAILROAD DECISION IN KENTUCKY
—ORDER FOR THE SALE OF THE COVINGTON AND LEXINGTON RAILROAD.—We learn by private dispatches from our correspondent at Lexington, that on yesterday morning the State Court, at Lexington, decided the various questions arising in the case of Winslow, Trustee, vs. the Cov. and Lex. R. R. Co. The following comprises the substance of the decision:

I. All the mortgages in controversy, first, second and third, as well as the mortgage to the Directors, and the income mortgage, were decided to be valid and binding on the Company and stockholders.

II. That the first and second mortgages had priority over all other liens on the road.

III. As many of the income bonds as were sold before the execution and record of the 3d mortgage, have precedence over such of the holders of the 3d mortgage bonds as had notice of the income bonds.

IV. The 3d mortgage bonds have priority over all income bonds not sold at the time of recording the 3d mortgage.

V. The holders of 3d mortgage bonds, who had no notice of the income bonds when they purchased, have precedence over the incomes.

VI. That the 2d mortgage holders are entitled to a sale of the road for the payment of their whole debt, upon credit in accordance with the mortgage, and a sale of the whole road is ordered for the payment of all the debts due by mortgage.—*Commercial*.

MINING STORIES AND REALITIES.

From the *Arizona*.

Whenever some individual wishes to create an excitement for Arizona or Sonora, he always begins ransacking and parading the old newspaper accounts about the mines of Mexico; drawing heavily on his own imagination, and filling up the intervals with sketches of farming country, that fit almost any where else, but in these two territories. At times the intention may be good, but the result must ever be bad to the emigrant and his family. The mining stories, too, are generally nothing but hearsay affairs, that have wandered through divers generations, and finally have assumed a wonderful, and, to the unacquainted, an enticing shape. There is one thing they must all have in common, that is, the principal personage who knew always all about the mines—is dead. These stories not only here, but all over Mexico, generally fit under the following heads:

1st. Some fortunate wretch hunting cattle, or camping out, finds in the ashes of his camp-fire, some white metal which he takes to be lead. He neglects to notice it—afterwards he can't find the place again, or he dies just while hunting for it.

2d. Indians bringing in large lumps of pure silver. Indians never show metallic veins—afraid they will die. Finally some one persuades them to go by the vein and leave a sign, thereby cheating the spirit of the lower regions; but that old fellow is not so easily humbugged: he sends a rattlesnake, or some other thing, in his way, that kills him. The Indian goes to the upper hunting-ground, and the story remains.

3d. A most fruitful source, however, is found in the country surrounding the Mission of the old Jesuits. For the last three hundred years they have been accused of knowing and having worked rich mines. In the seventeenth century they were formally accused of hoarding their immense wealth in Lower California. A commission sent by his most Catholic majesty the king of Spain, reported the fathers hard at work, raising Christians, beans and squashes, and the informer as being crazy. These shrewd men are accused of having worked the San Saba mines, in Texas, that have never been found. They are now said to have known the Sierra Nevada gold fields in California. Sonora and Arizona are dotted with spots where they are reported to have covered up some awful rich mines. Generally, these mines are said to be closed with massive doors, but the first plank has yet to be found. There is no doubt these industrious priests often worked mines to get metal for their church bells, or to employ the idle Indians, who did not cost them more than the corn they eat, which was raised by the others of the same tribe. But the fathers of these Missions are dead and gone.

4th. Another source for these romantic writers, who like to see things by the light of Aladdin's lamp, are the books and statements Messrs. Ward and Wilson, of Mexico. The most reliable of these are, undoubtedly, the notes of Mr. Ward, the British Minister; but as far as regards the frontier, at least, they are not based on facts either, but mostly on supposition and reports. Mr. Wilson cites Mr. Ward generally, and the newspapers cite Mr. Wilson again and again, until the topic becomes disgusting and void of force. Such notes on mining as those of Mr. Wilson's, are of no value at all, as they lack all consistency, and bear the stamp of the author's ignorance in such matters on the face. For instance he cites, without comment, page 416, in his book

"Mexico, its Peasants and its Priests," the following on Lower California:

"The benefitting is no less perfectly done than the labor at the mines. There are no haciendas for benefitting. Many persons that engage themselves in mining speculations, have one, two, and even five horse mills, with which they grind the metal; this they mix with quick-silver and salt, imitating the process by the pati, (amalgamation,) in proportion of 50 lbs. of the first, and 75 lbs. of the second; to 625 lbs. of metal, and proceeding by means of fusion in bad ovens, they obtained silver," &c., &c.

Now, I can assure Mr. Wilson that the few poor mines worked by a few poor miners in Lower California, are worked precisely as those in Mexico and Peru. There is no such absurd thing as a mixed process of patio and furnace. Any man, who will reflect for a moment only, will perceive that quick-silver, placed in a hot furnace, would immediately evaporate, without producing the slightest change on the admixed ore and salt, which require an infinitely higher heat to be in any way affected at all. I suppose this is the first time that quick-silver is cited as a plan for smelting.

In another part of his work, page—, he says that the freight alone of one steam engine at the Francisco mines, in Mexico, amounted to over 1,000,000 of dollars. Shortly afterwards "of the various pumping machinery, just one-half of their cost was caused by the freight from the sea coast to the place of erection." Now this is merely absurd. He does not state the rate of freight, but allowing in the engine case, the same rate as that for the pumps, then this engine must have originally cost \$1,000,000. Rather a gigantic affair this, and liable to cause a tremendous blowing up of any company, no matter how large or rich.

These are merely undigested statements, and only serve to throw doubt over others more probable. It is strange that Mr. Wilson, the matter-of-fact man, should have allowed himself to be carried away by the fabulous and most ridiculous mining stories, and to base on such foundations the future grandeur of Northern Mexico. While we agree with him in many things regarding the much exaggerated Aztec civilization, its mud monuments and barn-like architecture of the same material, the same now in use amongst the Pueblo Indians of New Mexico, we very much distrust his authority in mining matters. His pictures of Northern Mexico, where he never was, are entirely overdrawn, and erroneous.

If we wish to cite numbers and examples of rich mines, there is no necessity of going back to the fabulous ages of romance. We can find them sufficiently grand for all reasonable purposes nearer home, and nearer to our own times. Where is there a parallel to California's 500,000,000 dollars produced in only ten years? What history can show an equal to the great gold fields of Australia and Siberia? Compared to these, all the silver mines in the world sink into insignificance. It is true, they have produced similar sums, but it took centuries to accomplish it.

As it may be interesting to some of your readers, we will give a few notes on some of the great mines of the day:

THE REAL DEL MONTE SILVER MINES.

These mines are four in number, and belong to a mixed company of Mexicans and Europeans. They are situated about 9,000 feet above the level of the ocean, in the highlands of Mexico, some twenty leagues from the capital. Already, last century, large sums of silver were extracted from their ores. They were several times abandoned, and again suc-

cessfully re-opened. Since 1830, large sums were unprofitably expended by an English company; but the present owners have, with great economy, better management, and, perhaps, better luck, achieved a most brilliant triumph.

According to the report of the chief engineer, "they produced, during the last five years, ending 31st December, 1857, \$11,823,803 00, leaving to the shareholders, after paying the owner's shares of profit, and providing for greatly extended new works,

The sum of.....	\$2,684,416 00
The yield in 1853, was.....	1,537,769 00
" 1857, was.....	3,039,016 00

Showing an immense increase in the production of silver. The average yield in 1854 was \$52 per ton; production 1,811,882 00; which shows that the enormous amount of near 35,000 tons of ore had been reduced. Allowing the same average for 1857, this would give 50,000 tons of ore.

For the reduction of these ores, the three different methods:—

The Furnace—The barrel, or German amalgamation, and the American, or patio amalgamation, are applied, in accordance with the nature and value of them.

The cost of smelting per furnace per ton, was.....	\$59 94
The same quantity by the barrels.....	15 59
" by the patio.....	11 84
The yield of the ore used in the furnace per ton, was.....	345 60
Yield in the barrels.....	62 24
Yield in the patio.....	43 58

The different prices paid for reduction are by no means to be taken as a criterion, each class of ore was subjected to the process best adapted for it.

THE BURRA-BURRA COPPER MINE,

Situated in South Australia, lat. S. 34° 25' lon. E. 139° 4'.

From the engineer's report, we extract the following:

"A retrospective view of seven years give a production of 87,839 tons of ore, averaging about 24 per cent of copper.

The whole subscribed capital of the company was.....	£12,320
The whole expense in that time.....	900,000
There were paid, in 17 dividends, to the shareholders.....	308,000
This gives to each share of an original value of £5.....	125
Balance still on hand for division.....	86,255

Capt Roach reports at the 50 fathom level, a splendid lode of malachite of the richest quality; and at the 40 fathom level a beautiful lode of red oxide, 12 feet wide which, it is calculated, will produce thousands of tons of ore on that level alone, to say nothing of the lower ones.

The number of men and boys, including officers, on the 30th of November, 1852, was 157, which, owing to the gold discoveries, was reduced to 100 men, at the end of the year.

In 1853 there were issued, in all, since the formation of the company, 2,464 shares. Paid in cash, £5; present value, £135. Dividends paid to 3d March on each share, £195. In last 7 years 37 times the paid in capital has been refunded in dividends.

THE MINNESOTA COPPER MINE, IN 1859.

This is the richest worked copper mine in the Lake Superior copper region. The stock of the company is divided into 20,000 shares, on each of which \$3.50 has been paid in. They are now worth \$120 each. In other numbers, the original investment of \$70,000 has now a value of \$2,400,000.

The net profits divided among the stockholders during the first six years, from 1852 to 1857, amounted to \$980,000, showing a reproduction of 14 times the original investment.

THE CERRO PASCO SILVER MINES,

Are situated in Eastern Peru, about 11° south of the line. These mines were discovered in 1631. According to Lieut. Herndon, U. S. Navy, the ore is quarried in monster pits, open cuts, and is very poor; but the facilities for procuring, at little expense, large quantities, and their easy amalgamation, makes the working of them profitable. The principal mass of the extracted ores yield but about 16 ounces to the ton.

According to Mr. Castleman, these mines produced, up to 1849, the enormous sum of \$475,000,000, which would give an annual average of \$2,170,000. The annual average is now only estimated at \$2,000,000. Cerro Pasco is situated on the Eastern slope of the Andes, at an elevation of some 13,800 feet above the sea, and have a population of about 7,000 souls.

HUANCARELLA QUICKSILVER MINE,

Is situated about 200 miles S. E. of Cerro Pasco, and, according to Mr. Castleman, produced, 1571 to 1789, 1,040,452 quintals of quicksilver. Allowing \$65 as the average value per quintal, the value of the product is \$67,629,380. The expenses were \$10,587,845 during that period.

Since then this mine has produced but little, all schemes to re-open it having failed so far, but they are not considered as exhausted. Bolivar, the Dictator, refused for them, in 1828, the round sum of \$600,000 or \$800,000.

THE SAN JOSE DE PARAC SILVER MINES, PERU.

This is no very great establishment, but only mentioned here to show the interior economy, as a model. There are annually reduced at this mine 750 tons of ore, with an average yield per ton, of about 128 ounces of silver. The ores, in consequence of blende, are roasted with about 87 per cent. of salt, and amalgamated by the Patio process. The annual yield is \$70,000. Expenses \$30,000. According to this, the average would only be \$93 per ton, with an expense of \$40 per ton, for mining and reduction.

The hacienda for reducing the ores is managed by 1 superintendent, 3 major domos, and 40 hands, Indians.

The 4 mines belonging to this company are situated 2 leagues from the reduction works, and in charge of 1 major domo, 4 corporals, and 60 hands, divided into 2 gangs, working each 12 hours out of 24.

The salary of the superintendent is \$1,200 per annum; major domo \$30 per month; corporals \$21; miners 62½ cents per day; hands at the works receive 50c. per day.

It would be highly interesting to get statistics of the great mines of Mexico, Quanaxuto and the Alison, and the great gold mines of California; also, those of the new Almaden quicksilver mines in that State; in comparison with those of Almaden in Spain, which have been worked over 2,000 years. Also, notes on the rich mines of Germany and Hungary, especially those in the Ore mountains, where (I believe in the 14th century,) immense masses of virgin silver were found on the surface, similar to those discovered in the Plancha de la Plata, near Arizona, in 1760. The great copper mines of Falhaun, in Sweden, are yet productive. The ore is very poor, but notwithstanding all this, they produced, during the greatest part of last century, over 800,000 lbs. of copper per annum.

Not less interesting would be the statements of the iron and coal mines now worked. Any one in possession of reliable data would confer a benefit on the public by publishing them.

Arizona is particularly interested in obtaining information respecting mining operations, as she is, par excellence, a mining country, and the mining State of the Union, as the future will show. We shall not be able to show such magic results as did the placer mines of California, but will exhibit a gradual development that will be really amazing; as soon as we have security from Indian depredations, laws, capital and science will come to our aid, and such will be the case.

We have in Arizona, mineral lodes containing ores of a far superior character than those of the above cited mines. The question is whether they can be produced in such immense quantities. The copper ores from the Santa Rita de Cobre, the Ayo, and hundreds of other veins are extremely rich; the difficulty of transportation, and the want of fuel, has, however, prevented their being profitably worked, so far. Nothing but a railroad will remove the difficulty. The silver ores are as far superior to those of other parts as the copper ores are. In the Heintzelman mine, the rarest specimens of rich silver ores, of great variety, have been found, also, specimens of cinnabar and virgin silver, and copper, in the same vein. The general yield of the ores there, is not surpassed by any others in the world.

Arizona has had no fair chance yet to show her wealth. It is in the depth, beneath rugged mountains. All our excavations, so far, are but mere scratches; our reduction works mere trials and tests on the pigmy scale. Our locality, monstrous difficulties and wants, are entirely misunderstood and neglected at home, and even here. This leads to badly equipped enterprises, delay, and disappointment. The failures are attributed to the country and the mines, when in reality they are owing to want of knowledge of mining.

Hoping that this may prove interesting to some of your readers, and that where I am mistaken I may be pardoned—having but few notes here for reference, I remain, &c., H. E.

NEW YORK AND ERIE R. R.

A meeting of the Directors of the Erie Road was to have been held to-day to discuss the question of a change in the Presidency and other matters, but the rain prevented a quorum. At the meeting yesterday a resolution reducing the salary of the President to \$5,000 was adopted, but it was afterward reconsidered and the amount fixed at \$8,000. The annexed statement in regard to the Receivership, was prepared by the counsel of the Company:

"On Thursday last a judgment was recovered against the New York and Erie Railroad Company for \$55,000, on Sinking Fund bonds, and an execution issued the same day. Other suits were pending in which the same questions were involved, and it became plain that if the bondholders wished to protect the property of the corporation and hold it together for a reorganization, some steps must be taken at once. A requisition by holders of nearly a million of fourth mortgage bonds was made upon the trustees of the fourth and fifth mortgages, to proceed immediately for a foreclosure and the appointment of a receiver. The officers of the Company were notified of the requisition, a complaint was drawn setting forth all the mortgages and praying for a decree establishing and protecting the rights of all parties, and for a receiver of all the property of the Company, empowered to run the road, and pay the operative and the interest

on mortgage and other debts. The officers of the Company, yielding to the emergency, did not resist the motion, and an order was made by Judge Mason, at Norwich, in Chenango County, on Tuesday, for the appointment of a Receiver, according to the prayer in the complaint. This will not necessarily or probably result in the destruction of any of the interests in the property subsequent to the mortgage debts. If the time has come for the redemption of the capital of the Erie Railroad, it can be done by mutual agreement better than by litigation. While the parties are making their agreement between themselves, the property will be protected by the Court. But if the holders of the Erie stock and securities are wise, they will at once take steps for a new organization, which is inevitable, and restore this valuable property to the custody of its owners."

It is supposed that two or three weeks will elapse before a Receiver will be named, and in the meantime arrangements may possibly be concluded which will obviate the necessity of one. Certainly, if a Receiver is to be named within two or three weeks, who will supersede the present officers and Directors, it appears to be child's play to be reorganizing salaries and making new officers for such a short period. Such a step, if taken a year or two ago, might possibly have saved the Erie Company from the present crisis; at all events, the same result would have been arrived at, at a much smaller cost.—*New York Tribune of Saturday.*

OUR RAILROAD.—We have to record, each succeeding week, the continued extension of the track-laying, and the iron-horse is fast approaching the Lake City terminus.

Col. Sanderson, the indefatigable President, has just returned from Charleston, where he succeeded in raising ample means for the continuing and completion of the road. The people of Florida owe a debt of gratitude to Charleston, for their present as well as former liberality, in encouraging and assisting in the opening and facilitating trade, and her banks and merchants have always been generous in extending their good will and substantial aid to us.

The worthy President of the Southwestern Bank, James Rose, Esq., is, and has always been, a strong friend of our Road, and to his influence and assistance in recent negotiations, is owing, in a great measure, the success in getting means. The Southwestern Bank is an old and reliable bank. They have recently issued their notes from a new plate, which are elegant specimens of art, and have sent out for circulation here their first issues; our merchants, planters and others, should encourage and keep in circulation these notes, rather than the bills of other banks abroad; it would, in a measure, show our appreciation of the favor shown us by that institution. So far, and we do not see how it can be otherwise in future, our bonds have constantly increased in value, and capitalists are investing in them with confidence. Mr. John S. Ryan, an old established broker in Charleston, has been selected as the financial agent at Charleston for the sale of our bonds. His familiarity with the details and resources of the company will ensure an able discharge of his duties in this respect. Our citizens here, and on the line of the road, may well be proud of the success of this great undertaking, and most fortunate have they been in the selection of their executive officers. Dr. Baldwin, the pioneer, who first broached, labored and brought to a successful termination the organization of the

company, and who, for two years, devoted his whole time and talent to its prosecution, deserves and receives the gratitude of all right thinking men. Col. Sanderson, his successor, assumed the duties in the commencement of the great financial panic, and the only wonder is that he succeeded at all in negotiating for funds or iron, but the Colonel is one of those men who is not disposed to give up, and how well he has succeeded, the present results of the road show.

The stockholders and directors have done wisely in continuing such a President, and so long as he will consent to serve, they will do well to continue him.—*Jacksonville (Fla.) Republican.*

FRANCE.

EXTENSION OF RAILWAY ENTERPRISES UNDER THE PRESENT GOVERNMENT.

The railway construction has been extended to a much greater length under the existing government, and with comparatively small pecuniary assistance; for while the concessions to railways up to the breaking out of the revolution amounted to only 2,237 miles, the total length conceded up to the 1st of January, 1857, was 6,984 miles; and of the actual expenditures on their construction up to that date, of 3,127 million francs, 700 millions were expended by the State; four-fifths of the government expenditure having been on account of the engagements of the constitutional monarchy.

The following two statements compiled by Mr. Tooke from a report by Mr. Rouher, Minister of Public Works, which appeared in the *Moniteur* of the 30th November, 1856, will exhibit the facts with regard to the railway construction in France:—

Abstract of the official statement of 30 November, 1856, by M. Rouher, Minister of Public Works, relative to the amount of the actual expenditure on Railways in France, by the State, and by private Companies, in periods of years, 1830-56.

Periods.	Expended by the State.	Expended by companies.	Total, annual total.	Average
1830-47.....	\$36.5	\$1 6.5	\$193 0	\$7.5
1848-51.....	59.5	40.5	100.	25.0
	\$116.0	\$177.0	\$293.0	\$13.5
1852-54.....	10.5	\$129.5	\$140.0	\$46.5
1855.....	11.0	86.0	97.0	97.0
1856.....	4.0	91.2	95.5	97.5
	\$141.5	\$484.0	\$625.5	\$66.5

The five unit figures are omitted; thus, 10.5=10,500,000. Pounds sterling changed into dollars at the rate of £1=\$5.

Statement in English miles of the Mileage conceded to the leading Companies; of Mileage Open; and the Mileage yet to be Completed; as on 1st January, 1857, according to the official report of M. Rouher.

Bompanies.	Length, conceded.	Mileage, Mil., yet to open, be constructed
Northern.....	697	495
Eastern.....	1,111	687
Western.....	1,105	547
Southern.....	509	445
Orleans.....	1,083	759
Lyons Group.....	1,554	958
Central.....	763	80
Various.....	262	66
	6,984	4,036
		2,948

The foreign figures exhibit in the plainest manner the extraordinary extension in railway operations which has taken place in the last few years. And in view of the facts which they exhibit, the question presents itself in a distinct form, whether the floating capital of France, that which could be safely taken from the ordinary modes of industry, for employment in the new and gigantic schemes and enterprises set on foot by the Imperial Government, had been so greatly increased in this short space of time to warrant such appropriations, or whether that which seems to have been so distended is in reality anything but a

speculative expansion, exposed to the most imminent peril from the action of unfavorable causes.

In consideration of these questions, therefore, I shall give in the first place some account of the economical condition of France, from which some judgment may be formed, as to how far it might be expected, that her available resources would become developed under the most favorable system of commercial legislation. The present financial and commercial policy of the government may, then with considerable advantage, be introduced.

COAL AS AN AID TO INDUSTRIAL PROGRESS.—Questions of high economical value arise out of the possible developments of the great coal fields of the United States, which comprise no less than 196,850 square miles—added to which the British provinces contain 7,350 square miles. These coal areas are amazing, and may be productive of immense commercial results in the far future. When we reflect upon what has been achieved by the produce of the coal fields of Britain, mere specks compared with those of the United States, and in figures amounting to only 4,500 square miles,—when we further consider the total coal fields of Europe, and find them only 8,964 squares miles—and then endeavor to anticipate the mining of the enormous fields of the United States upon an extensive scale, we are led to forecast a future of almost boundless enterprise for that wonderful country. An estimate of the probable produce of the American coal fields may be formed from some data afforded in an excellent work just published by Prof. Rogers, on the *Geology of Pennsylvania*. Averaging the total thickness of the workable coal in Great Britain at 35 feet, we have a total of workable coal equal to 190,000,000,000 tons. In the same way, estimating the total area of the *productive* coal fields of North America as 200,000 square miles (that is inclusive of the British Provinces,) and averaging the thickness of good workable coal at 20 feet, a result of 4,000,000,000,000 tons is gained. Or, to make these results more appreciable, if we take the amount of workable coal in Belgium as 1, then that in all the British Islands is rather more than 5, that in all Europe 8½, and that in all the coal fields of North America is 111. This method of ratio is more intelligible than that of relative superficial magnitudes—and we at once perceive that the United States possess more than twenty-two times our amount of coal. We apprehend, however, when mining discovers more fully the character of the American coal, that the superiority of our best bituminous coal will in a large measure compensate for our smaller quantity.—*London Mining Journal.*

INVENTION FOR RAILROAD CARS.—We saw yesterday a new invention to be placed upon railroad cars so as to enable them to turn corners at right angles, or nearly so. The invention is very simple, and would astonish almost any one with its simplicity. The whole thing is done by the wheel, and not by any change in the axle, or by an improved fifth wheel, as most persons would be likely to suppose. The gentleman is about filing a caveat, and we will not give a detailed description until he has secured himself from any outsider who might slip in between him and his invention. That it will be one of the greatest improvements ever introduced upon cars, especially on city railroads, there can not be the least doubt.—*N. O. Delta.*

MONETARY AND COMMERCIAL.

During the week past the money market has been as close as during any previous week for some months. There has been, however, towards the close of the week, an evident letting up. The scarcity of currency, produced by the causes noticed in our last week's review, was known, of course, to be necessarily of temporary duration, hence, no change took place in rates of discount by regular houses. The only question has been "can it be done at all," without going outside. From the improvement experience in the last few days, we may reasonably expect an easier state of the money market in the future. There has been necessarily more paper forced on the street, which has been selling at various rates, governed by the necessities of the seller, and the lack of conscience of the buyer, say from 15 to 24.

The tone of the market for Eastern Exchange, during the latter portion of the week, has been firm. On Monday it declined, under the scarcity of currency, to $\frac{1}{4}$ prem. selling and $\frac{1}{2}$ buying.

Illinois and Wisconsin are selling at $2\frac{1}{2}$ to $2\frac{3}{4}$ dis., and Missouri at $1\frac{1}{2}$. Relative to the condition of the New York banks, the *Courier and Enquirer* of Tuesday, says:

The Bank Statement for the past week shows a healthy and gradual curtailment of loans, and a still larger reduction of cash liabilities, the items for the week showing,

In Loans, a reduction of.....\$409,000
In Deposits, a reduction of.....1,950,000
In Specie, a reduction of.....680,000

Compared with the corresponding week of August, 1858, the leading items are as follows, (fractions omitted):

Years.	Loans	Specie	Circulation.	Deposits.
1858...	\$129,892,000	35,145,000	7,784,000	90,340,000
1859...	118,938,000	20,083,000	8,623,000	72,524,000

The loans are now ten millions less than in May last.—A further curtailment to the extent of 6 or \$8,000,000, in the course of the next eight weeks, will place the Banks upon a footing more satisfactory to themselves and to the conservative portion of the community.

Although the specie is fifteen millions less than at the beginning of August, 1858, there is a reduction of deposits to the extent of eighteen millions of dollars during the same period, leaving the Banks in a really stronger position now than before, as 72 millions may be considered the lowest point to which the deposits will go.

STEPHENSON AND ALDERSON.—I have waited to see whether any one would point out the fallacy of Stephenson's statement (*Athen.*, No. 1533, p. 217,) that either iron or ice will bear a weight passing over it at a greater velocity, which it could not bear if it went slower; and that "when it goes quick, the weight in a manner ceases." The very reverse of this is the truth, as was clearly established by the "Iron Commissioners," which was appointed a few years since, to inquire into the causes of the breaking down of the iron bridge over the Dee. And the principle so established is now universally acted upon throughout our railways; the speed of the trains, upon approaching bridges of any considerable length, whether of iron or wood, is usually slackened to eight, six, or even four miles an hour, according to circumstances; and the same rule, viz., of going slow, and not of going quick, is always observed in passing over an unsound part of an embankment. I was myself present at some very interesting experiments made by this Commission at the iron bridge of the South-Eastern Railway, near Epsom, in the presence of Lord Wrottesley, Sir W. Cubitt, the Astronomer Royal, and several others. Prof. Willis had contrived a very ingenious apparatus, which, fixed to the center of one of the iron girders, measured and registered the deflection of the bridge at the passing over of any weight. An engine with a heavily-laden tender was then passed over the bridge at speeds varying from ten to sixty miles an hour, and it was found that the greater the speed, the greater was the deflection of the girder.

K. A. W.

—*London Athenæum*, Feb. 26, 1859.

TOLEDO, LOGANSPOUT AND BURLINGTON R. R.—A well advised Railroad correspondent of the *N. Y. Times*, writes that he has advices from Logansport to the purport that the Toledo, Logansport and Burlington Railroad Co. commenced laying track at the New Albany & Salem Railroad crossing on the 16th inst.—About 3,000 tons of their iron has already arrived from England, and is being rapidly forwarded westward, and they have bills of lading for the balance contracted for. They contemplate making a connection with the Peoria & Oquawka Road, at the State Line, by the 15th of September, and at Logansport with the Toledo and Wabash Road, by the 15th of October. Our correspondent thinks that, in view of the large crop of wheat already secured in Illinois, this line, when open, will, probably, have a very large freight business to Toledo, as there is a saving by this route of nearly 1,000 miles, over shipments made from Illinois by water communication via Chicago.

NOTICE TO CONTRACTORS.

PROPOSALS WILL BE RECEIVED AT THE OFFICE of the City Passenger Railroad Company, southwest corner of Third and Race Streets, until MONDAY NOON, August 15, for the construction of the following routes, viz:

FIRST—Main from Fourth to Fifth, out Western Row to Brighton; returning down Baymiller to Findlay, to John, to Fourth, back to Main.

SECOND—From Third and Lawrence, down Third to Wood, up to Fifth, thence to Freeman, back to Smith, thence to Fourth, thence to Lawrence and down to Third.

About 480 tons rolled iron, (43 lbs. to the yard); 16 $\frac{1}{2}$ tons curved rail of cast iron, (70 lbs. to the yard); 80,000 lineal feet white pine, 5 by 7 inches; 10,000 cross ties, of chestnut, or white oak, or white pine, will be required.

Contractors will make their bids as follows:

1. For furnishing all material and completing the road entire.
2. For furnishing materials, each portion separately.
3. For constructing the road.

The materials will be required to be delivered, one-third August 25; one-third September 5; one-third September 15.

For specifications and further information apply at the Office of the Company. THOS. D. LOVETT, Engineer.

Ag. 11.

RECEIVER'S SALE.

BY virtue of a Judgment of the Court of Common Pleas of Muskingum County, Ohio, rendered in a certain case therein pending, in which the "Clinton Bank of Columbus is Plaintiff, and Douglas, Smith & Co., and others, are Defendants. I will offer for sale, at the Court House, in the City of Zanesville, in the said Muskingum County, at the hour of one o'clock, in the afternoon, on the 13th day of September next, the following described parcels of land, situate in the Western Addition to the said City of Zanesville, as the same is designated and delineated upon the plat of said addition, recorded in the Recorder's office, of said county, in the Record of Plats, Book No. 1, page 13, &c.; that is to say, Lots Nos. 1, 2 and 3, of square 17, in said "Western Addition," appraised at \$150 each. Lots Nos. 4, 5 and 6, of said square 17, together with the strip of land between the south-eastern ends of the said lots, and lots Nos. 10, 11 and 12, in the said square, said strip of land being about 16 feet wide, with the buildings erected on the said lots and strip of land, and the fixtures and appurtenances thereunto belonging, appraised at the sum of \$6,500.—There are erected on the said lots, a brick shop, for the manufacture of passenger cars, 120 feet by 50 feet, roofed with slate, and also a wood car shop, 120 by 40 feet; steam engine and Boilers; 2 Daniels' Planing Machines; 1 upright saw; 1 Turning Lathe, Shafts, Cones, Pulleys, Hangers, &c., connected with said machinery.

Lots Nos. 7, 8, 9, 10, 11 and 12, of said 17th square, with the buildings erected thereon, and the fixtures and appurtenances thereunto belonging, appraised at \$7,000. There are erected on said parcels, a Brick Machine Shop, 80 feet by 40 feet; a Forge Shop, 40 feet by 40 feet, containing 8 forges; a Carpenter Shop, 120 feet by 26 feet. Foundry buildings, one Lathe, 6 feet swing; 1 Boring Machine; 1 large Screw Cutting Machine; 1 Planing Machine; 3 Hand Lathes; 1 large Drill Press; 2 small Drill Presses; 1 wheel press; 1 Foundry Fan; 2 Screw Cutting Machines; 1 small Drill Press; Shafts, Pulleys, &c., used with said machinery.

Lots Nos. 1, 2, 3, 7, 8, 9, 10 and 11, of square 21, in said Western Addition, appraised at \$150 each.

Lot No. 4, in said square 21, on which is erected a small dwelling house, appraised at \$250.

Lots Nos. 5 and 6, in said square 21, with the buildings thereon, and the fixtures and appurtenances thereunto belonging, appraised at \$800, on which lots is erected a large Foundry building, with Crane, Cones, &c.

Lot No. 12, in said square 21, on which is erected a stable, appraised at \$250.

Lots Nos. 1, 2, 3 and 4, in square 16, in said Western Addition, on which is erected a large frame building, appraised at \$1,000.

Lots Nos. 5, 7 and 8, in said square 16, appraised at \$150 each.

Lot No. 6, in said square 16, appraised at \$175.

The said parcels of land are situated on the line of the Central Ohio Railroad Company, on the west side of the Muskingum River, and immediately opposite the city of Zanesville, and formerly occupied, in part, by the Machine Shops, Foundry, Car Manufactory, &c., of Douglas, Smith & Co., known as the "Muskingum Works." The "works" are well arranged and convenient, and have capacity for a force of from 100 to 150 men. The location is healthy, and the facilities for procuring pig iron, coal, &c., &c., render the location one admirably adapted for such "works." Terms Cash.

And I will also, on the 14th day of September, 1859, at one o'clock, P. M., at the said "Muskingum Works," offer for sale the following personal property used in said "works," to wit:

2 Axle Lathes, 22 inch swing; 1 Axle Lathe, 26 inch swing; 1 Slide Lathe, 20 inch swing; 1 Slide Lathe, 15 inch swing; 1 Slotting Machine; 1 small Slide Lathe; 2 Slide Rests; 1 Grind-stone, with shafts and fixtures; 8 Blacksmith vices, work benches and clamps; 1 Screw Cutting Machine, No. 40; 12 large Anvils; 13 sets Blacksmith Tools; 2 Ripping Saws; 1 Cut-off Saw; 1 large and 1 small Trenching Machine; 1 Tongue and Grooving Machine; 1 Morthising and 1 Boring Machine; 1 Caul.

Terms Cash.

JOHN TAYLOR, Jr., Receiver.

Aug. 4, 15

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co., Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase.

Ag. 4, m.6.

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANA OR SANDOVAL

FOR

Decatur,	Springfield,
Bloomington,	Peoria,
Burlington,	Quincy,
La Salle,	Rock Island,
Dixon,	Galeana,
Prairie du Chien,	St. Paul, and
St. Anthony,	

And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANA for all the above points. Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via

PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all

TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

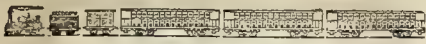
Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,

W. P. JOHNSON,
Gen'l Southern Agent, Cincinnati.
Gen'l Passenger Agent, Chicago.

June 21, 1859.

Cincinnati, Hamilton and Dayton



RAILROAD.

FOUR TRAINS

LEAVE THE SIXTH STREET DEPOT DAILY.

TRAINS RUN THROUGH TO RICHMOND, LIMA,
SANDUSKY, AND DELAWARE WITHOUT
CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND
NORTH-WESTERN CITIES.

(Columbus time, which is seven minutes faster than Cin-
cinnati.)

6 A. M. EXPRESS TRAIN—For Cleveland and Pittsburgh, via Delaware, makes close connection at Crestline for Pittsburg, Baltimore, Philadelphia and New York; and at Cleveland for Dunkirk, Buffalo, Boston and New York. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 7:20 P. M.; Quincy and Galena at 7 A. M. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Muncie. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

8 A. M. MAIL TRAIN—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STEAMER FOR DETROIT; at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at Delaware with the C., C. and C. Road, for Cleveland and points East. Also connects with Junction Railroad at Hamilton for Oxford.

4:30 P. M. TRAIN—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Also, connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago. Also connects with Junction Railroad at Hamilton for Oxford.

6 P. M. TRAIN—For Dayton, Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 8 A. M.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; at the new Ticket Office on West side of Vine street, between the Post Office and the Burnet House; or at the Sixth Street Depot.
D. McLAREN, Superintendent.

FREEDOM IRON COMPANY,

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods,
Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

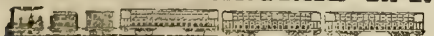
JOHN A. WRIGHT, Sup't.

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works.
June 9.

New Time Table

OF THE

NEW YORK CENTRAL R. R.



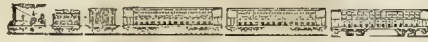
Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp. 7:00 A. M.	7:00 P. M.	7:00 P. M.
Mail 9:00 A. M.	12:50 A. M.	
New York Exp. 11:15 A. M.	9:40 P. M.	9:00 P. M.
Night Exp. 5:00 P. M.	4:00 A. M.	4:00 A. M.
Utica Accom'n. 6:00 P. M.	Ar. U. 10:00 P. M.	
N. Y. Mail 11:15 P. M.	10:00 A. M.	10:00 A. M.
Leave Buffalo.	Leave Bridge.	Ar. Alb'y.
New York Exp. 5:15 A. M.	5:15 A. M.	3:30 P. M.
Steamboat Exp. 8:00 A. M.	8:00 A. M.	8:00 P. M.
Mail 11:00 A. M.		2:30 P. M.
Cleveland Exp. 6:00 P. M.	6:00 P. M.	4:40 A. M.
Cincinnati Exp. 11:00 P. M.	11:00 P. M.	8:30 A. M.
Utica Accom'n. 11:00 P. M.		10:00 A. M.

Commencing April 11, 1859.

LITTLE MIAMI

AND—

COLUMBUS AND XENIA



RAILROAD.

FOUR TRAINS DAILY.

Three Through Express Trains.

FIRST TRAIN—No. 1 Express, at 6 A. M., connects via Columbus and Cleveland; via Columbus, Crestline, and Pittsburg; Detroit via Cleveland and Steamers. This train stops between Cincinnati and Columbus, at Loveland, Deerfield, Morrow, Xenia, Cedarville, South Charleston, London, and West Jefferson.

SECOND TRAIN—No. 2 Express, at 8:30 A. M., connects via Columbus, Bellair, and Benwood; Wheeling, via Columbus, Steubenville, and Pittsburg; via Columbus, Crestline, and Pittsburg; via Columbus and Cleveland; Detroit, via Cleveland and Steamer; Springfield. This train stops between Cincinnati and Columbus at Plainville, Milford, Loveland, Morrow, Spring Valley, Xenia and London.

THIRD TRAIN—Accommodation, at 4:40 P. M., for Columbus and Springfield.

FOURTH TRAIN—Night Express, at 11:30 P. M.; connects via Columbus, Bellair, and Benwood; Wheeling, via Columbus, Steubenville and Pittsburg; via Columbus, Crestline and Pittsburg; via Columbus and Cleveland. This train stops at Loveland, Morrow, Corwin, Xenia and London. *Sleeping Cars on this Train.*

No. 1 Express through to Cleveland without change.

The Night Express Train, leaving Cincinnati at 11:30 P. M., runs daily, except Saturdays. The other trains run daily, except Sundays.

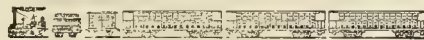
For all information and Through Tickets to Boston, New York, Philadelphia, Baltimore, Washington, Buffalo, Niagara Falls, Dunkirk, Cleveland, Pittsburg, Wheeling, and all Eastern places, please apply at the offices, Walnut Street House, No. 1 Burnet House, south-east corner of Broadway and Front Streets, and at the Eastern Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Superintendent.

Omnibuses call for passengers by leaving directions at the Ticket Office.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads. Steamers, etc., for and from all points in the West, South-West and North-West.

Fare to New York and Boston ONE DOLLAR less than via any other route.

TWO TRAINS

Leave Wheeling daily at 8:05 P. M., and 11:30 A. M.
Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City. Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2.

Quick time and sure connections.

Inquire for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

E. F. FULLER,

General Western Agent.

L. M. COLE,

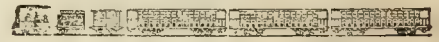
General Ticket Agent.

W. P. SMITH, Master Transportation.

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BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

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Jan 8 1y 119 Walnut st., Odd Fellows' Building

CHICAGO,
Great Western and North-Western
ROUTE.INDIANAPOLIS & CINCINNATI
SHORT LINE

RAILROAD.

(VIA LAWRENCEBURG.)

Distance 110 Miles and No Change of Cars Between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS LEAVE CINCINNATI daily, (Sundays excepted,) from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6 A. M.—Chicago and Terre Haute Day Express—Through to Terre Haute, Lafayette, and Chicago, with but one change of cars.

SECOND TRAIN, 2:15 P. M.—Accommodation—The 4:15 P. M. train arrives in Indianapolis at 10:10 P. M.

THIRD TRAIN—Chicago and Terre Haute Night Express—8 P. M.—Arrives at Indianapolis at 1 A. M. This train runs through from Cincinnati to Chicago, with but one change of cars.

The above trains make close connections at

Indianapolis, Lafayette and Chicago,

WITH TRAINS FOR

Terre Haute,	Lafayette,
Springfield,	Jacksonville,
Rock Island,	Danville,
Galesburg,	Burlington,
Keosau,	Milwaukee,
Mattoon,	Pana,
Naples,	Peoria,
Galena,	Dunleith,
Quincy,	Racine,
Prairie du Chien,	Decatur,
Bloomington,	Joliet,
Lasalle,	St. Paul,

And all towns and cities in the North-west.

Connections are also made at Indianapolis with the Peru and Indianapolis Railroad for Kokomo, Peru, Logansport, Fort Wayne, Toledo and Detroit.

Be sure you are in the right Ticket Office before you purchase your ticket, and ask for tickets

Via Lawrenceburg & Indianapolis.

THROUGH TICKETS,

Good until used, may be had at the Company's Offices, north-west corner Broadway and Front Streets, under Spencer House.

No. 1 Burnet House, north-west corner Third and Vine Streets.

Also at the Walnut Street House.

And at the Depot, where all necessary information can be had.

W. H. L. NOBLE, General Ticket Agent.

Commencing May 22, 1859.

OHIO & MISSISSIPPI



RAILROAD.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCENNES, Cairo, and St. Louis, at 9:00 A. M., and 8:30 P. M.

Three Daily Trains for Louisville, at 9:00 A. M., 2:00 P. M., and 8:30 P. M.

One Train for Evansville at 8:20 P. E.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 8:30 P. M.

RETURNING—FAST LINE—Leaves East St. Louis, (Sundays excepted) at 6:50 A. M., arriving at Cincinnati at 10:10 P. M.

EXPRESS TRAIN—Leaves East St. Louis daily at 2:40 P. M. arriving at Cincinnati at 6:48 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the offices, Walnut Street House, bet. Sixth and Seventh Streets, No. 1 Burnet House, corner office; north-west corner of Front and Broadway; Spencer House Office; and at the Depot, corner of Front and Mill Streets.

W. H. CLEMENT, General Superintendent.
Omnibuses call for Passengers.

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

SOLE IMPORTERS
PROSSER'S PATENT SURFACE CON-
DENSERS for high pressure steam, with sea or
other bad boiler water, gauges, 3-cutter drills, counter-
sinks, tube end cutting bars, expanders, tube sealers,
steel wire and whalebone brushes, pull lever wrenches,
tubes—plain or enameled, screwed together for Artesian
Wells, HOLLOW SLABS for various purposes, Steel for
Rollers.
27jan. THOS. PROSSER & SON,
28 Platt Street, New York.

G. G. LOBDELL. H. S. M'COMBS. D. P. BUSH.

BUSH & LOBDELL,
Wilmington - - - - - Delaware
MANUFACTURERS OF

CHILLED WHEELS

AND

TIRES,
For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent
FOR THEIR

CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE,

WITH OR WITHOUT AXLES.

WHEELS FITTED

To Hammered or Rolled Axles,

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

ap2

A Book for Every Business Man!

JUST PUBLISHED

—THE—

POST-OFFICE GUIDE!

For Post-Masters and Business Men.

CONTAINING

▲ Complete List of Post-Offices in the United States
and Territories, arranged by States and Counties; ▲
Complete List of all Distributing Post-Offices; Rates
of Foreign and Domestic Letter Postage; Rates of
Printed Matter, Transient and Regular; Abstract
of the Laws and Regulations of the Post-Office De-
partment, &c., &c.

COMPILED BY E. PENROSE JONES,

Late Assistant Post-Master at Cincinnati.

Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.

U. S. BLANK AGENCY, CINCINNATI POST-OFFICE, }
January, 1859.

This work has been carefully compiled and corrected by
E. PENROSE JONES, Esq., late Assistant Post-Master of the
Cincinnati P. O., from the Records in this Department, and
other sources, and contains the most complete list of Post-
Offices especially of the Western, North-Western, and
South-Western States, yet published.

MAHLON H. MEDARY,

Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an octavo pamphlet of about 100 pages.
The entire matter is kept standing in type, and as the com-
piler is promptly advised of all New Offices, Changes and
Regulations of the Department, the information is corrected
up to the last day of publication, an advantage possessed
by no other work of the kind.

OBSERVE, That this list is arranged by States and Coun-
ties, making it especially valuable to business men. No
similar arrangement has been published since 1856. There
are 3000 more offices in this than in any book heretofore
issued. The Price is one-half that of any work of the kind
now published.

If Single copies sent by mail (postage prepaid) to any
address, upon receiving Twenty-five Cents in Silver or
Postage Stamps. Five Copies sent for \$1.00, or Twelve
Copies for \$2.00.

Address,

C. S. WILLIAMS,
194 Walnut Street,
Cincinnati, Ohio.

Mar 10, 64

WHEELER & WILSON'S



SEWIN & MACHINES.

W. M. SUMNER & CO., cor. Fourth and Wal-
nut Streets, second floor, Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky., Columbus, O.,
Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with
important improvements, at a reduction on former prices; and
to meet the demand for a good, LOW-PRICED FAMILY
MACHINE, have introduced a new style, working upon the
same principle, and making the same stitch, though not so
highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALIKE ON
BOTH SIDES, impossible to ravel, and leaving no chain or
ridge on the under side, the economy of thread, and adapt-
ability to the thickest or thinnest fabrics, have rendered this
the most successful and popular Family Sewing Machine
now made.

At our various offices we sell at New York prices, and
give instructions, free of charge, to enable purchasers to
sew ordinary seams, hem, fell, quilt, gather, bind, and
tuck, all on the same machine, and warrant it for three
years.

Send or call for a circular, containing all particu-
lars, prices, testimonials, etc.
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WM. SUMNER & CO.

1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th
Corby, Gossin & Co.'s make, for sale very
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TRAVER & AUBERY,
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GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

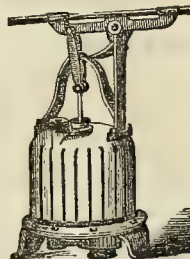
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite
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Companies, Manufacturer
Distillers, Miners, and the pub-
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as the best Pump now in use
and acknowledged by all who
have used them to be perfect—
are simple in their construc-
tion, compact, durable and not
likely to get out of order; well
adapted for Steamboats, Rail-
road Water Stations, Distill-
eries, Breweries, Furnaces,
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terns, Stationary Fire Engines, Garden Engines and for
all purposes where a Pump can be used. Also, for forc-
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rapidly.

Also, McGowan's Patent Ball Valve Pump, designed
for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings
Lead, Copper and Gas Pipe furnished at the lowest mar-
ket prices.

Full and perfect satisfaction guaranteed in all cases,
when properly put up according to directions.

Orders thankfully received and promptly filled at the
shortest notice.

SILVER MEDAL. (The highest prize) awarded
the Compound Steam Pumping Engine at the late Fa-
Ohio Mechanics' Institute. June 18, 1855—13

MOSELEY'S TUBULAR WROUGHT IRON



ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE
T now been fully tested in this vicinity, and it is
universally conceded that they can not be excelled.
The Roofs, are wholly of Wrought Iron, or mixture of
Wood and Iron; Sheeting always Iron.

The bridges are wholly Wrought Iron except the floor,
which is wood, like the floors of ordinary Bridges.

We are prepared to make these structures in any
quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per
foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs.
\$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100
square feet, part wood and part iron, from \$12 to \$20
per square.

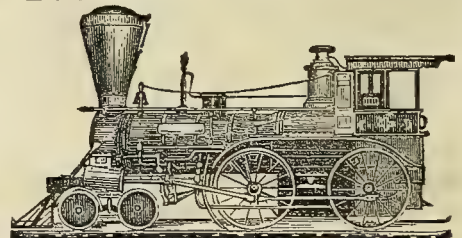
Increase of span of bridges, or width of buildings
makes an increase of price, but the increase in price is
no more than the increase of wooden structures.



We can furnish iron of every size to work into
Bridges and Roofs, and Railroads or other companies
buying the right to use them and the iron of us, can
make their own structures, one third less than the
above prices. Our structures weigh only from 1-4 to
1-10 that of wood; difference in freight in a long dis-
tance buys our work. In a few days we will have at
our factory, 497 West Third Street, in this city four
different specimens of our Roofs, where the public can
inspect them to their satisfaction. We beg them to
give us a call, as all our work is warranted, and we ask
no pay on ordinary jobs until the work is done and ap-
proved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O.
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CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive
equal in efficiency and durability to the best Eastern
manufacture. Also, Shaping and Slotting Machines
suitable for railroad shops. Also, all kinds of heavy
forging and casting done at short notice. Also, bolts for
bridges cut with dispatch.

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The twelfth annual term is now open. Charges, \$102
per half-yearly session, payable in advance.

Address the Superintendent, at "Military Institute,
Franklin Springs, Ky.," or the undersigned.

P. DUDLEY,

President of the Board.

Jan 5th,

The Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:
Thursday Morning, Aug. 18. 1859.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.
To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

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" " six months,..... 12 00
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If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

IF The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

NEW YORK AND ERIE R. R.—It is said not to be Mr. Marsh's intention to make any important changes in the *personnel* of the Road. The Committee of Directors are engaged in making out a scheme of capitalization, but as yet have adopted no plan. Mr. Moran favors the adoption of the entire debt at par, and the stock at about 15 per cent. This would make in round numbers, a general account of about twenty-eight millions and a half, which is evidently too large. Another proposition before the committee is to take the mortgage debt at par,

Say.....	\$17,500,000
Unsecured and Sinking Fund Bonds, at 80 in Stock.....	6,000,000
Stock at 15 in stock.....	1,650,000
Loan to pay off overdue coupons, &c., up to 1st of January.....	1,100,000
Total.....	\$27,250,000

It is understood that to save the property, it will be necessary, under any scheme which may be adopted, that the unsecured bondholders and stockholders shall advance the Company money enough to carry it through to next January, and for this purpose it is estimated that \$1,000,000 or \$1,100,000 will be needed. Should the road be reorganized, according to the above programme, and the gross earnings should be five millions, which is rather less than the amount earned in the year ending Sept. 30, 1858, the result would be nearly as follows:

Gross earnings.....	\$5,000,000
Working expenses, repairs, &c., 60 per cent....	3,000,000
Net earnings.....	\$2,000,000
Interest on debt about.....	1,300,000
Net for stock equal to over 9 per cent.....	\$700,000

PRACTICAL OPERATIONS OF RAILROADS—LITTLE MIAMI, COLUM. & XENIA ROAD.

To ascertain accurately what railroads really do in the way of practical operations, we must have an opportunity of contrasting these operations during a series of years. This, we can not do with most of our roads, for the greater part have been made so recently, that they have no such experience.

A few, however, afford us the opportunity, and among them the line from Cincinnati to Columbus, which has now been completed about eight years. We have the annual reports of these roads, from the beginning, and we propose to compare those for the last six years, from 1853 to 1859, to ascertain the changes which have taken place. These will be comprehended under the following heads.
1. Capital. 2. Receipts. 3. Expenses. 4. Business. 5. Wear and Tear. 6. Profits.

These Companies were, at first, separate; but are now consolidated. We shall consider them both as one, uniting the months given in their respective reports.

1. If roads have added any thing to their permanent structure, this must, of course, increase their capital, which is represented by the *cost* of their permanent structures. The *cost* of this line (119 miles) was:

In 1852.....	\$1,507,000
In 1859.....	4,827,428
In 1852, <i>per mile</i>	37,970
In 1859, " ".....	40,566

The increase of capital was caused by the construction of a double track, already completed to Loveland.

The debt was in 1853.....	\$1,031,554
" " and in 1859.....	1,467,500
Increase of debt.....	\$435,654
Increase of cost.....	320,428

The difference between these is mostly the difference of outstanding accounts from year to year, and really does not affect materially the capital of the road. In regard to *capital*, therefore, there is no material difference for several years. In that time (say since 1850,) the double track from Cincinnati to Loveland has been made; but, it has simply been added to the construction, without changing the *relative* amount or value of Stock. It is worth to the road all that it cost.

2. RECEIPTS.—The receipts of this line were:

In 1852.....	\$981,992
In 1859.....	1,200,499
In 1852 <i>per mile</i>	8,250
In 1859 " ".....	10,100

In the six years, from 1853 to 1859, the *receipts* of the companies have increased 22 per cent. The capital has only increased six per cent. If, then, the expenses have not been very greatly enlarged, the change must be largely in favor of the road.

Increase from Passengers.....	\$ 17,000
" " Freight.....	183,000

These facts are most instructive and valuable. They show the actual direction of railroad business, and what may be expected in

the future. While there is no diminution of passenger traffic, the increase of receipts has been on *freights*. Contrary entirely as this is to the early theories of railroad operations, it is, nevertheless, in strict conformity to the facts on which reasoning should be based. If we look clearly into the origin of commercial transactions, especially over an extensive country, we shall find that the *surplus product* business, (which implies also the return of goods exchanged for it,) has most to gain by steam transportation over land.

There are several good reasons for this—1. There are large sections of country where there is no water communication, and, consequently, where the gain in cheapness (over wagon transportation) must be very great; and consequently the introduction of a railroad must largely increase freights. 2. The gain of *time* is such, that on many expensive articles, the merchant can afford to pay a high freight to get them to market. 3. The diminution of time, diminishes interest and expenses. 4. For years, the increase of population and crops, increases the amount of freights to be carried over the roads. All these effects we see produced on the Cincinnati and Columbus line.

There is another point, which, if thoroughly examined, would prove instructive, and we should hope adumitory to Railroad managers. This is the *relative* increase of *local traffic*. The junction of the passenger traffic, in the Joint Report, causes apparently a diminution of passengers, in as much, as in separate reports the same passengers would appear twice over when they went over both roads.

We have examined the tables pretty carefully, and make out this result:

	Through.	Way.
In 1853.....	288,439	187,746
In 1859.....	127,301	183,000

Relatively, the local passenger traffic is increasing, and would do so much more, if this road would put on, within sixty miles of Cincinnati, an *accommodation parcels train*, which it has not now, and is a serious drawback on the facilities furnished by the road. The trains running into Cincinnati are all run for the benefit of travelers, and not at all for the benefit of the country on the road.

3. EXPENSES.—These were:

In 1853.....	\$461,247
In 1859.....	579,235
1853 per cent. of Receipts.....	47
1859 " ".....	43.25

The increase of expenses in these six years, is \$58,000, which is 24 per cent., and 2 per cent. more than the increase of receipts.

4. NET RECEIPTS.—These compare as follows, viz:

Gross receipts in 1852.....	\$981,992
Expenses in 1852.....	461,247
Net earnings.....	\$520,745

Which is on the capital.....	11½ per cent.
Gross receipts in 1859.....	\$1,200,499
Gross expenses in 1859.....	579,235

Net earnings.....	\$621,264
-------------------	-----------

Which is on the capital.....	12½ per cent.
------------------------------	---------------

It will be observed here, that although the expenses increased \$118,000; yet, the gross receipts having increased \$219,000, there was really a gain in net earnings of \$101,000, and since the capital increased but very little, there was actually a greater *profit per cent*. This is favorable to the road as to income at present, but rather unfavorable as to the increase of expenses. As the expenses have increased faster than the gross receipts, and as the passengers have not increased, it follows, that the carriage of freights *has latterly been profitable*. Why? We know not, except it be what we suspect is the case, that the competition in the Central Routes has affected the interest of Western Roads. This ought not to be. The roads west of the Alleghenies should regulate their own business.

5. **RUNNING EXPENSES.**—A great deal of effort has been made to determine the precise expense of each part of the running expenses of railroads. It has never been done exactly; for, of course, they must vary with each road, and each variation of condition. We take the following elements of running expenses from the reports of the Cincinnati and Columbus line:

RATIO OF EXPENSE.			
	1853.		1859.
Repairs.....	42	per cent.	43
Fuel.....	14½	"	13½
Oil, tallow, etc.....	5	"	2
Transportation.....	34½	"	37
	96	"	95½

These are not quite all the expenses; but indicate sufficiently near the proportions found to exist in the working of the Railroad. The head of "transportation," includes the wages of all the employees. The first thing which strikes one is the enormous proportion of "repairs," (i. e. the wear and tear) of the road. These repairs—*wear and tear*—on the line to Columbus amount to five per cent. on the capital. It is this which deducts so largely from the profits of railroads, and which demands more scrutinizing attention for the future, than any other department of railroad management. We think there is one consolation for railroad proprietors, which is a very important one. We think the cost of railroad repairs on the old roads will not, in a few years, be half what it is now. The reasons are these:

1. The road bed improves with each year, by becoming more and more solid, and thus requiring little attention.

2. Iron is improving and cheapening.

3. Great improvements are making in car wheels and other parts of machinery.

4. The small depots, water tanks, etc, will soon be finished and placed on a permanent basis.

Thus, we think, the expenses of running the roads are likely to diminish considerably. But, it is a department which still requires study and attention. The railroad is a very expensive machine; but, as we see in this instance, it may be made very profitable.

THE PENNSYLVANIA RAILROAD.

There can hardly be a doubt, that for extent, completeness of detail, and perfection of management, the Pennsylvania R. R. stands at the head of all similar works in this country. This road proper, extends from Philadelphia to Pittsburg—a distance of 353 miles; but when we add the various connecting roads, including the Pittsburg, Fort Wayne and Chicago, which are under the same management, we have nearly one thousand miles of railroad under the management of one set of men, and requiring for its successful working, a greater display of energy and business talent than are manifest in the management of the governments of any of the "Great Powers" of the earth.

The heart or great center of vitality of this chain of roads is at Altoona, 116 miles east of Pittsburg—a town of 5,000 inhabitants, which has been called into existence entirely by this road, and where are located the principal workshops of the Company, and which are of vast extent, and employing five hundred hands. The General Superintendent—Gen. THOS. A. SCOTT—resides at this point, and from thence, by means of telegraph, supervises all the vast business of this great concern. The brain, or head, however, of this Company, in the person of its President, EDGAR A. THOMPSON, is at Philadelphia, from whence emanate the general policy and management, that gives character and life to the whole establishment.

The administrative duties of the road and branches in Pennsylvania, are divided into the *Transportation Department, Accounting Department, Treasury Department, and Legal Department*—the whole under the general directions of the President, as the organ of the Board of Directors.

The Transportation Department embraces the entire business of the road and connecting branches, and is committed to the *General Superintendent*, who has a herculean task to perform. To him is intrusted all the real and personal property in use by the Company, the control and use of the road and branches, their motive power employed thereon, the shops, their machinery and tools, and the cars of the Company wherever they may be.

Of course he is held responsible for the regular and safe transportation of all passengers, mails and freight, upon the road, and on its connections (so far as he has control,) and is required to report the condition of the road and its appendages from time to time; to make suggestions in regard to the same, make purchases of all materials and current supplies required; make contracts for freight, nominate persons to fill the various offices established in his department, station agents, etc.; make rules for their government, and in short see that all the property of the Company, whether moveable or not, is properly taken care of, and kept in constant use to the best advantage, and at the same time take care

that every pound of freight or passenger intrusted to the road, shall be safely and speedily delivered to their destination, and that the best and fairest arrangements shall be made with all connecting roads, or rival interest.

It will readily be seen that the General Superintendent has a herculean labor to perform; but Mr. Superintendent General SCOTT, has so admirably disposed his forces, that the whole of this vast machinery moves like clock-work, and such a thing as a "hitch" or a stoppage in any part of it is almost unknown. By the aid of the electric telegraph, and his accomplished office assistant, Mr. CARNEGIE, Mr. SCOTT manages the whole as quietly and with as much ease as an expert magician manages the figures of his puppet-show. Indeed, a stranger visiting the delightful little office of the Superintendent at Altoona, would hardly be aware that in that quiet apartment was centered the power that controls and guides all the vast machinery and men, along a line of a thousand miles of road, and that the "click, click" of the telegraph in the adjoining room, is the pulsation that carries life and vigor to every part of the stupendous whole.

In addition to its railroads, this Company are the owners of 276 miles of canal; but which, we believe, are under the immediate supervision of another superintendent.

The earnings of that branch for 1858, were..... \$174,000
Expenses, repairs, etc..... 124,058

Leaving for net earnings..... \$55,042
Or about 5½ per cent on their cost—a fact we would commend to the Canal Commissioners of Ohio.

The total cost of the roads and canals belonging to this Company, was..... \$27,772,671 92
Its Capital Stock amounts to..... 13,240,225 00
And the Bond Account amounts to..... 15,772,840 00
Mortgages and ground rents..... \$321,611 11
Bills Payable..... 251,164 60
Accounts Payable..... 222,438 12

798,213 83
But as the Company had on hand at the date of this statement \$838,965, in cash, and \$790,546 in bills receivable and accounts, the three last items may be considered as doubly wiped out, and the Company free from debt, except its bonded five and six per cents., payable in 1875 and 1880—a condition which any road in the country might envy.

The gross receipts of the Company for 1858, from all sources, were..... \$5,185,330 68
Expenses, same time..... 3,021,885 04

Leaving net earnings..... \$2,163,322 02

As to the future of this road, there can be no doubt that it is destined to remain at the head of all our great through lines. Its control and management of the Pittsburgh, Fort Wayne and Chicago branch, gives it the advantage of its competitors into the heart of the great grain and cattle producing regions of the west; which advantage will be more clearly demonstrated whenever the company can extend its track through the city of Philadelphia, to the wharve on the Delaware—so as to avoid the delay and expense of drayage through the city; or makes a connection with the New Jersey roads, so that property and

cattle can be passed on to New York without trans-shipment. Then the extension of its lines to Cincinnati via Steubenville and Delaware, will confer upon it all the advantages for the South-western traffic that could be desired over the more northerly lines.

As a passenger route, it must always claim the preëminence. The grandeur and beauty of the scenery of the whole line from the Ohio to the Delaware—the permanence and solidity of the track—the entire absence of dust in all weathers, in consequence of its rock ballast, its comfortable cars, its sumptuous eating houses—a point quite overlooked by some other routes, but one of *vital* importance—and above all the kind and gentlemanly bearing of all its officers and attaché, from the Genl. Superintendent, down to the brakemen and train boys in the cars, must command for it the lion's share of the trade from the west and south-west for all time to come. D.

ENGLISH IRON.

We have lately received several interesting papers from an English friend, in which much valuable information is given concerning the mines, furnaces, and forges of England. The iron trade of the United Kingdom stands second in magnitude among the great industrial pursuits of the country, and the exports of iron manufactures are now worth fifty millions of dollars annually. Cotton fabrics exported are estimated at one hundred and fifty millions, and woollens at forty-five millions of dollars. At the beginning of the present century, the manufacture of iron amounted to only two hundred and fifty thousand tons, while now it is nearly three millions of tons annually. Indeed, the varied and expensive uses to which this metal is applied, and the immense amount of interests involved in its production and manufacture, fully justify the application of the name of "the iron age" to the present century: The last twenty years has seen the rise and rapid development of the railroad system, and the consequent enormously increased demand for iron. There are eight thousand five hundred miles of railroad completed in the United Kingdom, and, on a moderate computation, more than twenty-five thousand miles of rails have issued from the various iron works of the country to form the roads for this new system of intercommunication. But iron not only forms and sustains metallic highways upon the earth, and creates the ponderous locomotives which traverse them, but it is employed in ranging the ocean in every quarter of the globe. On the Clyde, twelve thousand persons are engaged in the construction of iron steamers, and out of one hundred and twenty-three steamers built within a given time at Greenock, one hundred and twenty-two were of iron, and only one of wood—while, in the same period, sixty-six steamers of iron were also built at Port Glasgow, and thirteen of wood. Houses, crystal palaces, and moveable residences for Australia, consume enormous quantities of iron; and, to go from great things to small, two hundred millions of iron pens are every year made by one firm at Birmingham, up one hundred and twenty tons of metal, and employing one thousand persons. Of a verity, iron is more valuable to mankind than gold, and the mines of Pennsylvania may therefore, be regarded as more to be prized than those of California.

[For the Railroad Record.]

OBSERVATIONS ON THE DANGERS AND DEFENSES OF THE MARITIME CITIES OF THE U. S.

CALIBRE OF CANNON FOR FORTIFICATIONS, AND USE OF RIFLED CANNON.

The calibre of cannon for fortifications, until the invention of the heavy naval and siege guns of this century, seemed to be generally settled and stereotyped. But these inventions have, with good reason, elicited discussion; and in fact, there was but one opinion could be formed, after the invention of the very heavy guns were adopted as part of naval armaments and siege trains—namely, that some portion of such guns should be introduced into defensive works of a systematic character. *Rifled* cannon is the most recent invention, never heretofore tried in the field, antecedently to the late campaign in Italy. It was surmised before they were used, that there was some complication about the machinery for managing them, which would largely impair their effect and entirely destroy their claim to superiority. But on trial, it was found, that either this difficulty in the machinery did not exist at all, or that the excellent training of the French artillerymen had so completely overcome it, that all the other advantages belonging to them, their lightness, vast range, and precision of fire, were practically evinced on a great scale, and of course most effectively. All accounts concur in attributing to them the principal success of the battle, while in preceding engagements they had rendered important service. One of the accounts respecting their operations in Italy says, speaking of the battle of Solferino: "Until then it had now and then been brought out, but at last it has played the principal part. The power of the rifled cannon is henceforth established." Quite differently from the Paixhan and other heavy guns, the properties of these guns fit them for service in forts, as well as in the field. It would be very useful, were it possible, to have guns of great calibre in fortifications and at the same time of light weight. But no invention heretofore has succeeded in combining both these qualities in that description of guns. The *rifled* cannon, as it appears to me, promises to diminish the necessity of so great a number of these guns in fortresses, but not at all to supercede the use of the heaviest guns now employed, or the introduction of a certain moderate number heavier than any heretofore used.

In fact Christendom has seemed to regard the very heavy guns once employed occasionally by the Turks as the invention of a barbarian people, resting on no scientific principles, but rather the result of caprice than of sound judgment, the great cannon employed by Mahomet II. at the siege of Constantinople, A. D., 1453, Mr. Gibbon has described and its

first operations, with much more minuteness, than we shall quote.* He says:

"A founder of cannon, a Dane or Hungarian, who had been almost starved in the Greek service, deserted to the Moslems, and was liberally entertained by the Turkish Sultan. Mahomet was satisfied with the answer to his first question, which he eagerly pressed on the artist, 'Am I able to cast a cannon capable of throwing a ball or stone of sufficient size to batter the walls of Constantinople.' 'I am not ignorant of their strength, but were they more solid than those of Babylon, I could oppose an engine of superior power; the position and management of that engine must be left to your engineers.' On this assurance a foundry was established at Adrianople; the metal was prepared, and at the end of three months Urban produced a piece of brass ordnance of stupendous, and almost incredible, magnitude; a measure of twelve palms is assigned to the bore; and the stone bullet weighed above six hundred pounds. A vacant place before the new palace was chosen for the new experiment. The explosion was felt or heard in a circuit of a hundred furlongs; the ball, by the force of gunpowder, was driven above a mile; and on the spot where it fell it buried itself a fathom deep in the ground."

In vindication of his belief in the truth of this account, Mr. Gibbon makes several judicious remarks, and among others as follows:†

"A Turkish cannon, more enormous than that of Mahomet, still guards the entrance of the Dardanelles; and if the use be inconvenient, it has been found on a late trial, that the effect was far from contemptible. A stone bullet of *eleven* hundred pounds weight was discharged with three hundred and thirty pounds of powder; at the distance of six hundred yards, it shivered into three rocky fragments, traversed the strait, and leaving the waters in a foam, again rose and bounded against the opposite hill."

Mr. Gibbon in his account of the siege of Constantinople by Mahomet, says:‡

"The great cannon of Mahomet has been repeatedly noticed; an important and visible object in the history of the times; but that enormous engine was flanked by two fellows almost of equal magnitude; fourteen batteries thundered at once on the most accessible places; and of one of these it is ambiguously expressed, that it was mounted with one hundred and thirty guns, or that it discharged one hundred and thirty bullets."

The latter is, perhaps, the true statement. In the early stages of using cannon, rapidity in firing those of considerable size could not reasonably be expected.

* See Mr. Gibbon's *Decline and Fall*, p. 197, Vol. XII, London edition.

† This was written or rather published about the year 1787.

‡ Page 217, *Decline and Fall*.

But in the present century, at a date more than twenty years later than that of the account given by Mr. Gibbon of the cannon of the Dardanellas and of the Constantinopolitan siege, we have an account from a British Admiral of the effects of such enormous cannon on his own fleet. He was sent, in 1807, to bombard Constantinople, or at least to threaten it very hard with that infliction. But finding the Turks immovable under his threats, and that they were directed by French Engineers and artillerymen preparing to batter him to the best of their ability, he concluded that a free use of discretion would be better than a free use of cannon, and the following is the account he gives us of the effects of the Turkish batteries as he sailed out of the Dardanellas, flapping the wings of fear.* This account is from Admiral Duckworth's official letter:

"I, therefore, as every hour was of importance, bore up at dark with the squadron; we arrived off Point Perquies towards the evening of the second instant, but the day light would not admit of our attempting to pass the castles, and the squadron came to anchor for the night; we weighed in the morning, and when I add that every ship was in safety outside of the passage, about noon, it was not without the most lively sense of the good fortune that has attended us."

"The Turks had been occupied unceasingly in adding to the number of their forts; some had been already completed, and others were in a forward state. The fire of the two inner castles had, on our going up, been severe; but I am sorry to say, the effects they have had on our ships returning, has proved them to be doubly formidable; in short, had they been allowed another week to complete their defenses throughout the channel, it would have been a very doubtful point whether a return lay open to us at all. The manner in which they employed the interval of our absence, has proved their assiduity. I transmit your lordship on account of the damages sustained by the respective ships; as also their loss in killed and wounded, which your lordship will perceive, is far from trifling. The main mast of the Windsor Castle being more than three quarters cut through by a granite shot of eight hundred weight, we have found great difficulty in saving it."

The number of killed and wounded was 283. Let it be observed the British did not stop to fight, but sailed by with all practicable speed.

Thus by these huge barbarian batteries was the fleet of Britannia disgraced, who boasts that—

"Britannia needs no bulwarks,
No towers along the steep;
Her march is on the mountain wave,
Her home is on the deep."

From these and other facts which we will

notice in a concluding number, I cordially concur with Major Barnard, that "large calibres are *imperatively* demanded for coast defense." How large, is a proper subject for discussion, and is a question which will require some experiments to determine.

NEW YORK & ERIE R. R.

SUPREME COURT—BROOME COUNTY.

James Brown and John C. Bancroft Davis, Trustees, and Daniel Drew, a Bondholder, Plaintiffs, *agt.* the New York and Erie Railroad Company, Defendants.

At a special term of the Supreme Court of the State of New York, held at the Court House, at Norwich, and in the County of Chenango, in said State, on the 2d day of August, in the year 1859.

Present: The Hon. CHARLES MASON, Justice.—A motion by the plaintiffs in this suit for the appointment of a Receiver of the property and franchises of the New York and Erie Railroad Corporation, founded upon the sworn complaint herein, and upon the affidavits of Daniel Drew and J. C. Bancroft Davis, and it appearing that due notice of such motion has been served, and due service of the summons and complaint made upon said Corporation, and said Corporation now appearing upon said motion by Selah Squires, Esq., as its counsel, and A. S. Diven appearing on behalf of the plaintiffs for said motion, and it further appearing that the mortgage mentioned in the complaint, and dated the 25th day of August, 1857, and known as the 4th mortgage of said Corporation, was duly executed and delivered by said Corporation, as alleged in said complaint, and was, thereupon, recorded and filed, and became a valid lien on property therein mentioned, and upon all the corporate estate, property, effects, franchises, easements, and other things therein described or conveyed; and that a large number of bonds have been issued by said company, which are secured by said mortgage, and the same are outstanding and unpaid; that the interest upon a portion of the said bonds is due and unpaid since the first day of April last now past, and that the said Corporation has not the means of paying said interest, and that the proceeds and profits of said mortgaged property, that should, of right, go to pay said interest, is likely, but for the protection of a Receivership, to be diverted to other purposes; and further, that the Trustees have been required to institute this proceeding, and that the institution of the same, and this motion, was necessary for the proper application of the income of said mortgaged property, and securing the payment of said interest. And it appearing that the said, the New York and Erie Railroad Company, is in a condition of insolvency, and that the mortgaged premises are a scanty security for the mortgaged debt.

And further, that the plaintiffs pray, among other things in said complaint, for a Receiver of all the effects, property and franchises, of the said Corporation, to operate and run the said railroad pending this suit.

Now, on motion of Mr. Diven, of counsel for the plaintiffs, it is ordered that a Receiver be appointed of said Corporation, and of the railroad, and real and personal property of the New York and Erie Railroad Company, and of all the property appertaining, privileges, franchises and power, on which said 4th mortgage is a lien, or which is covered thereby, and of the rents, tolls, and income of the same,

and of the powers and franchises of said Corporation, and of its title deeds and leases, and rights thereunder, wheresoever any or all of the aforesaid property, income, tolls, rents, powers and franchises, may be situated, collected, exercised or enjoyed, and whether in the State of New York, Pennsylvania, or New Jersey, subject to the laws of said last two named States, and that said Receiver be authorized to run and operate said road, and exercise said authority and franchises, and to preserve said property in proper condition and repair, so that it may be safely, and to the most advantage, used, and to protect the title and possession of the same, and to employ such persons, and make such payments and disbursements, as may be reasonably needful or proper in so doing, and for advice about his duties, and that said Receiver be authorized to demand possession and control of all property and franchises, documents and rights assigned to him, or of which he is appointed Receiver, and to collect the income, tolls and profits of the same, and to make the requisite payments therefrom. And that he pay the expenses of this application and the reference hereby appointed, and, also, the arrears now due and maturing, and to arise and mature to the employees upon the said railroad, and the amounts due and maturing, and to arise and mature, or material and supplies about the operation and for the use of said road; and that he pay the rents and taxes due and to grow due from said Corporation, and the sum due and to grow due for the rights, franchises and property, of said Corporation, in the State of Pennsylvania, to said State.

That the Receiver open new accounts of the money received and paid out by him, under the immediate supervision of competent agents, and cause to be entered therein all the moneys received and paid out in the discharge of his Receivership, and that all surplus moneys beyond his current expenditures be deposited in some secure bank or banks in the City of New York, and not to be drawn therefrom except on his order. And upon the accumulation of any sum exceeding \$75,000, the same to be deposited by the Receiver in the United States Trust Company, and that the same be drawn thence only on the order of said Receiver, pursuant to an order of a Justice of the Supreme Court, made on petition therefor.

That the said Receiver make up his accounts monthly, of all the moneys by him received and paid out, and that he, thereupon, file the same in the office of the Clerk of the County of New York.

That he receive and pay out all moneys, and hold and protect all property to him assigned, and operate said road in his name as Receiver. And it is further ordered that, in the discharge of his duties, said Receiver have authority to do all acts and things, and to make all payments proper and reasonably requisite to the honest and efficient discharge and exercise of the powers and duties by this order, and the laws and practice of this Court conferred upon him.

That he be authorized to employ such agents, assistants, and counsel, as may be reasonably needful and proper.

That he be authorized to settle and adjust and arbitrate all claims for damages, injuries, and loss, to persons and property, or otherwise, that may arise or be claimed against him as Receiver, in the operation of said road, and the discharge of his trust as Receiver, and that he be authorized to pay such sums, from the property of his Receivership, on adjustment of such claims.

* See Annual Register for 1807, p. 666.

The said Receiver be authorized to institute and defend such suits connected with the property and duty of his Receivership, as, in his judgment and by the advice of counsel, should be proper, and for the advantage of the property and rights to him committed, and to pay the proper expenses of the same and any judgment recovered against him as such Receiver in any such suit.

That the said Receiver shall be authorized, in all cases in which he has any reasonable doubt as to his duty, to apply to a Special Term of this Court, or to a Justice thereof, by petition or otherwise, for instruction and directions as to the matters to which such petition shall relate.

That in and about the discharge of his duties, such Receiver shall not, without an order or authority of this Court, dispute the validity of any of the mortgages of the said Corporation.

That said Receiver, upon entering upon the discharge of his duties, cause an inventory of all property by him received to be made and filed in the office of the Clerk of the County of New York.

And the Hon. William Mitchell, of New York, is hereby appointed a Referee to name and appoint the Receiver herein directed to be appointed. That said Referee is further required to ascertain and determine what will be reasonable and proper security, as to the amount and responsibility, for such Receiver to be named to give for the faithful discharge of his duty, and settle the form and attend to the execution of the same, and to cause said security in the form of a bond to be filed in the office of the Clerk of the County of Broome.

And it is further ordered, that upon such appointment being made, and the bond as security endorsed, with the approval of a Justice of this Court, being filed with the Clerk of the County of Broome, that said Receiver enter upon the discharge of his duty as such Receiver, and that from the date of such filing, and by virtue of this order and such designation and appointment of said Referee, said Receiver be, and he is hereby declared to be then clothed with all the foregoing rights, powers, and authority, as such Receiver.

And it is further ordered, that said Referee require the property of said company, herein directed, to go to said Receiver from said company, to be passed and assigned before him, and according to his directions.

And it is further ordered that the directors, clerks, attorneys, and other agents and servants of said Company, and each and every one of them, and said Company under the direction of the said Referee, and when said Referee is so qualified, disclose and deliver over, on oath, all the moneys, property, and effects of the said Company in their possession, or within their power, or under their control, or in their possession, or in the power or under the control of any or either of them, or in which the said Company have any interest, including all real property and the title deeds thereto, and all books, papers, and memoranda; and all evidences of, or securities for any debts or claims due, owing or belonging to the said Company, or in which the said Company have any interest, and that they also assign or deliver over to said Receiver, under the direction of said Referee, all public or private stock or stocks belonging to the said Company.

And it is further ordered, that the said Referee have power to compel the appearance of, and to examine, under oath, witnesses touching the property, funds, claims and effects of the said Company, and to compel the produc-

tion of all books, papers, memoranda, and vouchers, in any wise relating to or touching the same.

That said Referee report a reasonable sum for services, and the proceedings before him to be paid by the Receiver to be appointed, out of the funds to be by him received, as the same may be approved by this Court, and a reasonable compensation to said Referee.

IMPORTANT RAILROAD DECISIONS.

The Watertown News contains three several decisions in railroad cases which will interest many of our readers. The first is *Willis Phelps and others vs. Orville T. Brainard and others*.

MULLIN, J.—To enable the Potsdam and Watertown Railroad Company to complete its Road, it made a mortgage of its franchises and property, for \$800,000, to Brainard, Yelverton, and Corning, in trust for the security of the bonds which might thereafter issue, and the interest thereon. The Watertown and Rome Railroad Company by authority of the Legislature, guaranteed the payment of the \$800,000 of bonds issued by the said Potsdam Company, and the interest thereon. Before this guaranty was executed, an agreement was made and entered into between the said Companies, wherein and whereby the said Potsdam Company agreed among other things to surrender possession of its Road and franchises to said Watertown Company, if it should neglect to provide for the payment of the interest or principal of said bonds when due, and to retain the same and the income and profits thereof, until it shall be fully reimbursed for any payments made on account of said guaranty, but without prejudice to the rights of any holders of the remaining bonds issued under said first mortgage. The bonds so guaranteed were sold and are outstanding. Subsequently said Potsdam Company, made a second mortgage for \$200,000, to said Brainard and George C. Sherman, in trust to secure bonds for same amount and interest, to be and which were issued by said Company. The plaintiffs are owners of \$63,000 of these bonds.

A semi-annual payment of interest on the first mortgage bonds came due on the 1st of June, 1888, and was not paid by the Potsdam Company, but was paid by the Trustees of the said first mortgage in part, from the earnings of the Road after the same came into their possession. The former claims to have a counter claim against the latter to an amount equal to the interest so paid. In November last, the Directors of the Potsdam Company finding themselves unable to meet the interest which was coming due on the first of December, at a meeting duly convened, resolved to surrender the Road, property and franchises of said Company, to Brainard, Yelverton, and Corning, for the benefit of the first mortgage bondholders, and in pursuance of a provision to that effect in the mortgage given to said Trustees. A deed of surrender was accordingly executed and delivered; Brainard and Yelverton only signing the acceptance of the surrender; Corning as it is alleged, declined to accept; Brainard and Yelverton went into possession of said Road, and into the receipt of its income and profits. George B. Phelps had been acting as Superintendent of the said Road, and he was continued by said Trustees in that office. It is alleged by the Plaintiff, that certain of the holders of the second mortgage bonds, have requested Mr. Sherman, one of the Trustees in the second mortgage, to take possession of the said Railroad property and franchises, pursuant, I infer to a clause in the mortgage authorising said Trustees in default of the payment of principal or interest of said bonds, to take possession thereof; and it is further alleged that said Sherman did take possession, and at the time of the commencement of this action, was in the actual possession of said Road, and in receipt of the income thereof which was paid over to said Brainard. That said defendant Dutton had been appointed Superintendent of said Road by the Trustees. Brainard and Yelverton, with the intent of transferring said Road to the Watertown Company in violation of their trust, and to the great injury of said Potsdam Company. It is also alleged that said Dutton threatens to take forcible possession of said Road for and in behalf of said Brainard and others, Trustees. That the action of the Potsdam Company, in surrendering said Road, etc., to said Trustees, is unauthorized, fraudulent, and void.

The plaintiffs pray judgment that the contract between the two Companies be declared void so far as relates to the transfer of the Road by the Potsdam to the Watertown Company—that the surrender be declared void, and the Trustees enjoined from transferring said Road to the Watertown Company, or any of its officers or agents—that Brainard be removed from his office of Trustee under the second mortgage, and that an injunction issue restraining Dutton and his Agents from taking possession of, or intermeddling with the Road, and that a new one be appointed.

An injunction was granted by Judge Thompson pursuant to the prayer of said complaint, restraining said Dutton from taking possession of said Road.

A motion is now made to dissolve the injunction, so as aforesaid granted by Judge Thompson, on two grounds:

1st. Because the plaintiff is not entitled to the relief demanded in the complaint.

2d. That the Potsdam Company had the legal capacity to make the surrender, and that the Trustees having accepted it and gone into possession, are entitled to hold until the arrears of interest are paid up.

Assuming the matters alleged in the complaint to be true, it is quite clear that the plaintiff can not maintain this action. The plaintiffs are holders of stock of said Potsdam

Company, and of the second mortgage bonds, to the amount of \$65,000. The Trustees as mortgagees, are the persons who represent the legal rights of the Bondholders under the mortgage. The bondholders as such, have doubtless, equitable rights which they may enforce against the Trustees and third persons. In some of which cases the action may be in their own names alone, in others the Trustees must join. In this case it is alleged that the Trustees in the second mortgage have been required to assert their right to the possession of the Road, that they have done so and are in the actual possession of the Road, and in the receipt of the income thereof. The Trustees, then, have done all that could be required of them, and surely the bondholders can ask no more, than that the mortgaged property shall be taken from those to whom it was surrendered in conformity with the claims of a prior lien, and devoted to the benefit of the previous conditions. The plaintiffs then have not been compelled to come into Court to protect rights abandoned by their Trustees—the Trustees have performed their whole duty. Brainard and Sherman are Trustees of an express trust, and by section 113 of the code they are authorized to maintain an action in relation to the trust, without joining the *cestui que trusts*. Unless then, the Trustees are chargeable with neglect of duty, the *cestui que trusts* have no reason for coming into Court. It is, however, alleged that Dutton threatens to take possession of the Road and franchises of the Company, to the end that they may be transferred to the Watertown Company. As the Trustees in the second mortgage are in the actual possession of the Road, if Dutton should attempt to take forcible possession, the Trustees would have ample legal capacity to protect themselves against an alleged intrusion, and it would seem to be wholly unnecessary for the bondholders to ask protection for the Trustees against unlawful force. It is not pretended that Mr. Sherman is in confederacy with either the Watertown Company or the Trustees in the first mortgage.

I am wholly unable to discover that there is any excuse for these plaintiffs to bring this action. There are other parties capable and for all that appears in the complaint, willing to do whatever may be necessary to protect the rights of the bondholders; nor does it appear that the plaintiffs assert to have any equities that the Trustees may not embrace.

It is not shown by the complaint, nor was it on the argument, in what manner the Trustees under the first mortgage could transfer to the Watertown Company, the property and franchises of the Potsdam Company. Such a transfer is legally impossible without the authority of the Legislature. The Potsdam Company could not without legislative sanction, convey or mortgage its franchises—how then can the Trustees make a transfer, which shall in any manner impair the rights of any of the parties in interest. I presume the grounds of fear is that, if the agents of the Watertown Company become the agents of the Trustees, the two Roads will become a single Road, and will be operated and managed in accordance with the interests and wishes of the Watertown Company. Whether such a result would be injurious to the interests of the holders of the second mortgage bonds, I do not know. The Directors of the Potsdam Company, were satisfied with the integrity and capacity of the Trustees of the first mortgage when they were appointed. They were willing to leave the manner of operating the Road after the Trustees came into possession, to their discretion and judgment, and in the absence of any imputation of bad faith other than the employment of the agents of the Watertown Company to operate the Road, I can not say that such employment is a breach of trust, or that it will in any manner effect injuriously the interests of the holders of the second mortgage bonds. The Potsdam Company are legally capable of protecting themselves, and unless that Company is conspiring with the Trustees in the first mortgage, or with the Watertown Company, to do some act injurious to the holders of the second mortgage bonds, the latter have no right to come into Court to contest these questions,—and so long as the Trustees of the second mortgage act in good faith, their *cestui que trusts* have no right to come into a Court of law or equity for relief.

When the Trustees go into possession, they become responsible for the income and property transferred to them. They can not relieve themselves from responsibilities by transferring the Road to the Watertown Company. It is not pretended that these Trustees are insolvent, and while they are able to respond for the monies and property they receive, they will probably be careful to what agents they trust the property and interests in their charge.

I can not perceive why it may be offensive to the Directors or the Potsdam Company, to have the agents and officers of the Watertown Company put in charge of their Road; yet they have clothed the Trustees with a discretion which the Courts can not control, so long as it is exercised in good faith.

But the complaint having charged that the Trustees of the second mortgage are in the actual possession of the Road; and in the receipt of the income thereof, and the only mischief apprehended is the forcible taking possession of the Road and its franchises by Dutton, I can discover no ground whatever on which the injunction can be sustained, or on which it could possibly issue. The taking possession by Dutton, being, as it is alleged in the complaint, an illegal and unauthorized act, a mere trespass; an injunction will not go to restrain it—but if it could, the Trustees in the second mortgage or the Potsdam Company itself, are the proper parties to maintain an action for such relief.

The defendant Dutton against whom alone the injunction has been issued is shown by the complaint, to be a mere agent of the Trustees of the first mortgage. The general rule is, that an agent is not a proper party to a suit. Story's Eq. Pl. § 231. The exception to the general rule is when fraud is charged against the principal and agent (same § 232.) No charge of fraud is made against Dutton, and there is, therefore, no reason why he should have been made a party, or that the injunction should have issued against him.

The Trustees being parties, the injunction might be directed to their agents and servants, although they were not parties. 1 B. & O. Ch. Pr. 636, 637, 634. 5 S. & D. 293.

The injunction not having been directed to nor served upon the Trustees, they were at liberty to proceed and appoint a new agent, thereby rendering another suit necessary, and thus suits might be multiplied *ad infinitum*, without the slightest necessity.

The principal question involved in these motions, I have examined in deciding the motion in the case of Brainard and Others, vs. The Potsdam Company, and my views will be found, in my opinion, written in that case.

I must for the reasons above given, grant the motion to dissolve the injunction in this case with \$10 costs.

The second case is that of *Orrville Brainard and Others vs. Potsdam and Watertown Railroad Company, et al.*

The facts on which the plaintiffs' right to the possession of the Potsdam Company's road depend, have already been stated in the decision above. In the above (second) case it is moved by the defendants (in the first case, Brainard et al.) to set aside the first decision; which motion was denied upon the following grounds. That Railroad Corporations have the right to mortgage their franchises for raising funds. (Laws of 1850, ch. 146, sec. 5). That pursuant to the provisions of this statute, the Potsdam Company mortgaged to the plaintiffs above—their road for the benefit of the bondholders. The relation of mortgagor and mortgagee was thus established. In November last a default of payment of interest occurred, whence the plaintiffs went into possession, with the consent of the Potsdam Company. Such temporary surrender is neither a sale nor a lease; the only power transferred being that to operate the road and collect its earnings.

To allow the Potsdam Company to acquire control of its Road from the Trustees, by means of the attorney, if I may be allowed the use of the term, to it, of the agents appointed by the plaintiffs, or by appointing new agents, who shall take forcible possession of the Road and property, would be allowing to be done indirectly what it could not do directly. The law forbids an action by which to turn out the plaintiffs, and it can not and ought not to permit the same end to be attained by indirect and improper means.

But with regard to the provision in the mortgage authorizing the Trustees to take possession in case of default, and to the deed of surrender, the defendants deny the power of the Company to insert the clause in question in the mortgage, and the power to execute the surrender. It is insisted by the defendants' counsel, that the power to mortgage confers authority to execute a mortgage with the ordinary conditions and stipulations, and that the clause in question is not one of them. It must be conceded that this clause is not to be found in mortgages executed by individuals, and from the nature of it, would not be a desirable one for either Mortgagor or Mortgagee. But in the case of Railroad Corporations, it is the only provision that could be made, really beneficial to the mortgagee, and that would not be ruinous to the mortgagor. All the Railroads in our country have been constructed with borrowed capital—the loan is for a long term of years, and the interest generally, if not universally, payable semi-annually. In the vicissitudes of business, it would not be surprising that Companies should occasionally find themselves unable to meet the interest at the day. If the only remedy for the creditor in such a case, was to foreclose the mortgage, the Company giving the mortgage would be annihilated, its stock swept away, and all means of payment to creditors whose debts were not secured by mortgage would be destroyed.

On the other hand, if the mortgagee must in all cases of default foreclose, and the mortgagor should become hostile, refusing to surrender until after foreclosure and sale, and resisting the foreclosure as it might do in an entirely legal manner, using the earnings of the property in the mean time to carry on the war, wearing out and depreciating by carelessness and wantonness the property, the creditor would find when he came into possession, that which he looked to for security and payment, in a great measure valueless. To avoid consequences so ruinous to both, the clause in question, was, I presume, inserted in the mortgage given to the plaintiffs in this case, and is, I understand, the usual clause inserted in Railroad mortgages. To hold then that Railroad Companies have no power to insert a provision in their mortgages so wholesome and necessary, would be to impair, if not to destroy, all bonds secured by mortgages containing such a provision. To justify a decision that would carry with it such consequences, or that should even weaken the confidence of the public in such securities, the want of power should be clearly and conclusively established. The proposition is not satisfactorily established.

The power to mortgage the property and franchises, includes the power to do such other acts and things not forbidden as should be found necessary to carry it into effect. The law compels a surrender after sale on foreclosure, in individuals may surrender to the mortgagee the property mortgaged before foreclosure, with the same force and effect as if a decree had been entered. Now why may not a Railroad Company also surrender its property and franchises mortgaged, to its creditors? There is no where any statute or decision of the courts which in terms forbids such surrender. It prevents litigation, with its attendant costs and expenses—it is calculated to increase the security of the creditors—it prevents the dissolution of the Company mortgaging, and the consequent injury to its stockholders—it is the performance of a moral duty which the debtor owes his creditors when he finds himself unable to pay—in short, it is just and right, and should be upheld, if it can be, without interfering with legal principles.

The principal argument against the power is that, if the mortgaging company can surrender its franchises to individuals, that it is thereby destroying itself, and that important and necessary provisions of the General Railroad Act can not be carried into effect, unless the corporation

not only exists, but is in the possession of its road and franchises.

When the Legislature authorized these corporations to mortgage their franchises, it must be presumed to have anticipated, that the time would come when some one or more of them would be unable to pay, and that a foreclosure and sale of the property and franchises mortgaged would occur. If the franchises are of any value, the purchaser is as much entitled to them as to the engines or cars. Taking then the franchises, the purchaser has the right to use them, and thus he becomes clothed with all the powers and privileges which the corporation had at the time of the execution of the mortgage. How in this event are the provisions of the General Railroad Act to be executed? I apprehend that becomes a minor consideration. If the provisions of that law should be found to conflict with the rights of purchasers of the property and franchises of corporations, the latter will be protected though important provisions of the statute should be rendered incapable of enforcement.

By chapter 2-2, section 1, of the laws of 1842, provision is made for the organization of companies, by those who have become purchasers of the real estate, track and fixtures, of any Railroad Corporation, by virtue of any mortgage executed by such Corporation, or execution issued on any judgment or decree of any Court. It will be perceived that the Statutes does not apply to cases where the franchises have been purchased. The manner in which a purchaser of them shall use them, is left exclusively for the courts to regulate. It is not therefore of any importance here to inquire how a purchaser shall wield the corporate powers with which he has become clothed—it is enough to know, that he has the right, to use them, and that it is the duty of the Court to protect him in their use.

The question again recurs, if these franchises may be acquired by purchase on a foreclosure of the mortgage, why may not the corporation surrender them to the creditor without foreclosure? The answer is, it has not the power. It seems to me the power to mortgage, includes the power to surrender—that no good reason can be given why a surrender should not be permitted to be made voluntarily when it may be coerced. There may be cases when such a principle can not apply, but they must be very rare indeed.

The power to mortgage given by section 28 of chapter 140 of the laws of 1850, extends to mortgages of personal, as well as real estate. In those mortgages it is customary to insert a clause giving the right to the mortgagee to take possession if he shall deem himself insecure, or if default is made. In these cases, if the mortgagee takes possession, there is still left the same right of redemption, as in the case of real estate, the possession of which is voluntarily surrendered by the mortgagor. Now may not the mortgagor deliver over voluntarily to the mortgagee the property which he may at his own election take?

I can not entertain a doubt as to the power of the Railroad Company to surrender, with or without deed. If it may surrender, then a provision in the mortgage providing for a surrender is competent and valid.

Some stress was laid on the argument, on the fact that but two of the three Trustees in the first mortgage signed the acceptance of the surrender. I do not perceive any necessity for any of the number signing. The surrender, I think, would have been operative without writing, and certainly the acceptance must be. It is not a case in which the question, whether less than the whole of the persons upon whom a power is conferred, can act, arises. It seems to me that if they had refused to accept, under the circumstances, they would have been guilty of a flagrant breach of duty.

The motion to dissolve the injunction must be denied with \$10 costs.

The third case is that of *The Potsdam and Watertown Railroad Company vs. Orrville V. Brainard and Others.*

MOLLIN, J.—The complaint in this concedes the right of Brainard and others, Trustees in the first mortgage, to the income and profits of the Road, by virtue of the deed of surrender to them by the plaintiff, but denies their right to the actual possession of the road, the deed of surrender being in respect to that, void. The plaintiff further insists that the said Trustees never in fact went into possession of the said Road, but on the contrary permitted the plaintiff to manage it, paying over to the Trustees the income thereof. But that on the first of June last the said Trustees removed the superintendent appointed by the plaintiff, and appointed Dutton in his place, to the great injury of said plaintiff. The complaint plays that the trustees' rights may be declared—that the clause in the deed of surrender giving to them the possession of the road may be declared void, and that a temporary injunction issue to restrain them from taking possession, appointing any officers or agents for said road, or assuming to control the same.

It appears that the Trustees had appointed McBride superintendent after Dutton had been enjoined from assuming to act as superintendent, and McBride is made a party to this suit and an injunction is prayed against him also, restraining him from assuming to act as superintendent.

A motion is made to dissolve the injunction granted pursuant to the prayer of this complaint.

In this case the motion was granted, and so ordered by the court: it being held that the deed of surrender was valid, that it gives the Trustees possession of the Road, and that the injunction was obtained in violation of the injunction already issued, in case of Brainard et al. against this plaintiff.

Thomas Ely & Co. have just recovered a verdict in the United States District Court at Chicago of \$18,000 against the Mississippi and Wabash Railroad Company.

Fayette Circuit Court, (Ky.)

JUDGE GOODLOE Presiding.

AUGUST TERM—August 13th, 1859.

JAMES WINSLOW, Trustee, against THE COVINGTON AND LEXINGTON R. R. Co. Judgment.

This case coming on for trial, on the pleadings, depositions, exhibits and papers on file, and the Court being sufficiently advised, it is adjudged and ordered that the deed of mortgage executed by the defendant, the Covington and Lexington Railroad Company, to John A. Stephens and Charles N. Fearing, bearing date 1st March, 1852, and called the "first mortgage," is valid and binding on said Company and its stockholders, and operates to secure the payment of the four hundred bonds, principal and interest, in said mortgage mentioned; also, that the deed of mortgage executed by said Company to James Winslow, the plaintiff, dated 8th April, 1853, and called the "second mortgage," is valid and binding on said Company and its stockholders, and operates to secure the payment of the principal and interest of the one thousand bonds in said mortgage mentioned; also, that the mortgage made by said Company to said Winslow, dated 1st June, 1853, and called the "third mortgage," is valid and binding on said Company and its stockholders, and operates as a deed of confirmation and of further assurance to the first and second mortgages, and also to secure the payment of the principal and interest of the six hundred bonds therein mentioned; also, that the mortgages or pledges contained in the bonds, described and mentioned in the proceedings as "income bonds," which bonds, in the aggregate, are for the payment of the principal sum of five hundred and twenty thousand five hundred dollars, are valid and binding on said Company and its stockholders, and operates as security for the payment of the principal and interest of said bonds.

It is further adjudged and ordered that the first mortgage constitutes the first lien on the property, rights, credits and franchises of said Company, and has a preference in payment and security over all other liens or incumbrances thereon; that the second mortgage constitutes a lien on said property, rights and franchises, next in preference to the first mortgage, and superior to all other liens thereon; that the bonds issued under the third mortgage, and held at the commencement of the suit by Henry Vallette, R. W. Keys, S. B. Keys, Joseph C. Butler, and A. L. Mowry, and by all other persons except R. E. Bowler, Augustus Robbins, S. J. Walker, and J. W. Walker, have a lien thereon for their security and payment next in preference to the second mortgage; that the income bonds, amounting in the aggregate to one hundred and eighty thousand five hundred dollars of principal, which were sold by M. M. Branton and S. J. Walker, before the 16th of July, 1855, (as appears from Branton's deposition and Exhibit A., attached S. J. Walker's deposition,) have a lien on said property, rights and credits, next in preference to the bonds last named, for the payment and security of the principal and interest thereof; that the remaining bonds issued under the third mortgage, being those held by said Bowler, Robbins and Walker, at the commencement of this suit, have a lien, next in preference to the income bonds above named, on the property, rights, credits and franchises of said Company, for the payment of the principal and interest thereof; and the remainder of the income bonds, amounting, in the aggregate of principal, to three hundred and forty thousand dollars, have a lien on said property, rights and credits, next in preference to the third mortgage bonds last above named.

It is further adjudged and ordered, that the equity of redemption in regard to the second mortgage, that is, the right of redeeming the forfeiture of said second mortgage be forever barred and foreclosed, and it is ordered that all the property, rights, credits and franchises, of said Company, embraced in said second and third mortgages, be sold at public auction for the payment of the principal and interest of all the bonds secured by lien thereon as aforesaid, according to the priorities or preferences herein before adjudged, which sale shall be made on the following terms, to wit: The purchaser shall be bound, in the first place, to pay the principal and interest of the four hundred bonds for \$1,00 each, issued under the first mortgage, at the times and places at which said principal and interest shall become due, according to the tenor of said mortgage, and the four hundred bonds issued under said mortgage, according to its terms, shall be held by the holders thereof as the evidence of their rights under said sale, and of the obligations of the purchaser; and for their security shall continue to have the first lien on the property so sold, and the bonds shall be transferable after the sale in the same manner they now are. In the second place, said purchaser shall be bound, if his bid embraces the same, to pay the principal and interest that shall become due after the sale, of the one thousand bonds of \$1,000 each, issued under the 2d mortgage, at the times and place at which said principal and interest shall become due, according to the tenor of said bonds and mortgage; that is to say, the payments to be made at the Bank of America, in the city of New York, of the principal on the 1st day of March, 1853, and of the interest at the rate of seven per centum per annum, semi-annually, on the first days of March and September of each year, until the principal shall be paid, and the holders of said one thousand bonds shall hold their bonds and the coupons thereto attached, as evidence of their rights under this sale, and of the obligations of the purchaser, and upon the presentation of any interest coupon at or after its maturity for payment, it shall be the duty and obligation of the purchaser to pay the same; and the bonds aforesaid shall be transferable after the sale, in the same manner they now are. The purchaser shall also pay to plaintiff thirty-five thousand dollars, with interest thereon at the rate of six per cent. per annum, from the first day of September, 1858, until the day of sale, being the interest on said one thousand bonds which became due on the 1st of September, 1858; also the sum of thirty-five thousand dollars with interest thereon, at the rate of six per cent. per annum, from the first day of March, 1859, un-

til the day of sale, being the installment of interest on said thousand bonds, which became due 1st of March, 1851; also thirty-five thousand dollars with interest at the rate of six per cent. per annum, from the first day of September, 1850, until the day of sale, being an installment of interest that will become due on said thousand bonds before the day of sale, also the costs of the plaintiff in this suit expended, which sums, in the aggregate, shall be paid in equal installments at the end of six, twelve and eighteen months from the day of sale, with legal interest from said day of sale, for which the purchaser shall execute bond with good security, having the force and effect of a judgment. For the security of the sums of money, which the purchaser shall be bound to pay on the bonds aforesaid, there shall be a lien on the property, rights, credits and franchises purchased second, and next in preference to the lien for the security of the bonds issued under the first mortgage similar, and of equal validity with the lien thereon, now held by virtue of said second mortgage, and in addition thereto and as security for performing the obligation to pay the principal and accruing interest of said one thousand bonds, he shall deliver to the Commissioner of sale, securities of the cash value of one hundred thousand dollars, which securities may consist of State bonds of Kentucky or Ohio at par; also bonds of the United States, or of any of the States of the Union, which sell in New York at or above par; also, bonds of the Covington and Lexington Railroad Company, issued under and secured by the first or second mortgages aforesaid; also mortgages upon real estate of clear and unencumbered title, situated in Kentucky, or Hamilton County, Ohio, (the purchaser paying in cash all the expenses of investigating the title and ascertaining the value of such real estate.) But the purchaser may deliver securities other than those specially enumerated, which, if believed by the Commissioner to be of undoubted permanent value, may be received by him, subject to the approval of the Court, and all interest, income or profit, which shall accrue upon said securities, shall, until default on the part of the purchaser, be received by him for his own use. As a further security for the payment of the said principal and interest, the purchaser shall annually, out of the net earnings of the railroad so purchased, after paying out of the same the current interest on the bonds of the first and second mortgages, invest in safe and productive securities sixty thousand dollars, of which, thirty thousand dollars shall be a sinking fund for the payment of the principal of the first and second mortgages; and thirty thousand dollars a contingent and renewal fund for the payment of damages resulting from casualties, and extraordinary contingencies, and for making good the gradual wearing out and deterioration of the road, and its buildings and equipments, not made good by ordinary current repairs, which sums shall be laid aside before any part of the net earnings shall be applied to paying the interest or principal of claims on said property, inferior in precedence to the first and second mortgages, or in any other way for the purchaser's own use. Any amount expended by the purchaser in any year upon the road, in improvements and renewals, (over and above the current and ordinary repairs,) shall be deducted from the sum above ordered to be laid aside for a contingent and renewal fund during that year. The funds so directed to be laid aside shall be used alone for the purposes for which they are created, but until so used may be invested in said first and second mortgage bonds, or in loans, upon real estate security, or otherwise, as this Court may approve.

In the third place, the purchaser, if his bid embraces the same, shall pay in equal installments in six, twelve and eighteen months, with interest from the day of sale, all the interest which is in arrear upon all the third mortgage bonds, except those held at the commencement of this suit by Bowler, Robbins, S. J. Walker and J. W. Walker, with interest thereon from the time the said interest on the bonds became due until the day of sale, and execute bonds therefor with good security, having the effects of judgments, and shall undertake to pay the principal and interest which shall accrue after the day of sale, at the times and places the same shall become due, according to the tenor and effect of said bonds and said third mortgage; and said bonds shall be held and be transferable, and interest paid on the presentation of the coupons, as directed in regard to the bonds issued under the second mortgage. As a security for the payment of said principal and interest, the purchaser shall deliver to the Commissioner of Sale, securities of the cash value of one hundred thousand dollars, which shall be of the same character as prescribed in regard to those for the security of the second mortgage bonds, and subject to the same conditions, and in addition thereto, third mortgage bonds of this class may be received as security.

In the fourth place, the purchaser, if his bid embraces the same, shall pay in three installments, with interest from the day of sale, one hundred and eight thousand five hundred dollars, with interest thereon from the 10th day of July, 1850, until the day of sale, also the sum of nine thousand and twenty-five dollars, with interest thereon, at the rate of six per cent. per annum, from the 1st day of May, 1850, until the day of sale; also the sum of nine thousand and twenty-five dollars, with like interest thereon, from the 1st day of November, 1850, until the day of sale; also, nine thousand and twenty-five dollars, with like interest thereon, from the 1st day of May, 1850, until the day of sale; also the sum of three thousand five hundred and nine dollars, with like interest, from the 10th day of July, 1850, until the day of sale, being the principal and interest of the Income Bonds sold as aforesaid, before the 16th July, 1853, and the purchaser shall execute bonds with good security for the payment of said installments, having the force and effect of judgments.

In the fifth place, the purchaser, if his bid embraces the same, shall pay in equal installments of six, twelve and eighteen months, all the interest that is in arrear on the third mortgage bonds held by Bowler, Robbins, S. J. and J. W. Walker, at the commencement of this suit, with interest thereon at the rate of six per cent. from the times at which said interest on the bonds became due, until the day of sale, and shall execute bonds therefor bearing interest

from date, with good security, having the force and effect of judgments, and shall be bound to pay the principal and interest of the said third mortgage bonds at the times and places at which they are payable, according to the tenor and effect of said bonds and mortgages, and as security therefor shall deliver to the Commissioner securities of the cash value of one hundred thousand dollars, of the character, and upon the conditions prescribed in regard to the securities for the other third mortgage bonds, and, in addition, third mortgage bonds of this class may be received as security.

In the sixth place, all the remainder of the price that shall be bid for said property, shall be paid in equal installments at six, twelve and eighteen months, with interest from the day of sale, for which the purchaser shall give bonds with good security, having the force of judgments, which amount will be applied, first, to the payment of the remaining income bonds, principal and interest, and if there shall be any surplus, it shall be applied, pro rata, to the other debts of said Company.

The Commissioners in making the sale shall first ascertain by public outcry if any one will pay for the property, rights, credits and franchises to be sold, the principal and interest due upon the first mortgage as herein before prescribed, and if no one shall pay the amount, he shall make no sale until further order herein, but if any person so offers, then he will ascertain if any one in addition thereto will pay the money now due to the plaintiffs, and the principal and accruing interest on the second mortgage, and if none be willing to pay all, then he will ascertain who will pay the largest amount thereof; and if a bidder be found willing to pay all the interest and principal due and to become due upon the first and second mortgages, then he shall ascertain whether any one in addition thereto will pay the principal and interest due and to become due upon the third mortgage bonds held by others than Bowler, Robbins, S. J. & J. W. Walker, and if no one can be found willing to pay all due and to become due on said bonds, then he will ascertain who will undertake to pay the largest amount thereof, and if any one will agree to pay the whole amount due and to become due on said bonds, in addition to the amount due and to become due on the first and second mortgages then he will ascertain who in addition thereto will pay the largest amount in cash, payable as before directed, in six, twelve and eighteen months, until the bidding in cash shall amount to the full sum of the principal and interest due on the income bonds, the principal of which amounts to \$180,500, as before mentioned, and when the bidding reach the amount of principal and interest of said bonds, he shall ascertain if any one in addition thereto will pay the whole or any part of the principal and interest due and to become due on the third mortgage bonds, held by Bowler, Robbins, S. J. & J. W. Walker, as aforesaid, and if any one be willing to pay the whole amount thereof; then by bidding in cash, payable as secured as before, provided he will ascertain the highest and best bidder, and the highest and best bidder shall be the purchaser. And the commissioner shall forthwith prepare and deliver to him a certificate of purchase, and upon said certificate being delivered or tendered to such bidder, the purchase shall be binding on him, and upon his complying with the terms of his purchase, he shall be entitled to immediate possession of the property, and retain the same until such sale shall be either confirmed or quashed by this Court. If confirmed he will retain said possession; if quashed, he will surrender the property, etc., to a Receiver of this Court, and account for the earnings during his possession as Receiver; and upon his so surrendering and accounting and paying over all that shall be found due, all bonds and securities by him deposited as security, as aforesaid, shall be surrendered to him; but until he shall so surrender, account and pay said bonds and securities, shall be held as security for his so doing.

Upon the highest and best bidder being ascertained, the commissioner shall require the immediate deposit of securities of the cash value of twenty thousand dollars, as a security that such bidder will comply with the terms of purchase, for which purpose he shall be allowed the period of twenty days. If such deposit is not made, the commissioner shall disregard the bid, and immediately proceed to resell; but such bidder shall be reported to Court, and may be proceeded against for contempt of Court. If after making the deposit, the bidder shall fail to comply with the terms of sale, the commissioner shall again sell, upon forty days advertisement of the time, place and terms of sale, in a newspaper published in Lexington, one published in Paris, and one in Cincinnati, and one in Covington, and one in New York city; and said deposit shall be applied to reimburse all loss, damage and expense arising from such resale and the delay occasioned by said non-compliance.

The bonds for the payment of money hereinbefore required to be executed by the purchaser shall be made payable to the commissioner, with a specification in general terms, for whose use the same is to be paid; and the purchaser shall execute to said Commissioner his obligations to pay the principal and accruing interest of such of the mortgage bonds as by the terms of his bid he undertakes to pay.

When by the bid the purchaser undertakes to pay part only of the principal and accruing interest of any of the bonds having an equal lien, the amount bid shall be equally apportioned on such bonds, and the securities hereinbefore ordered to be delivered by the purchaser, shall be proportionally abated.

The sale hereinbefore ordered, shall be made at the Courthouse door, in the City of Lexington, on the 3th day of October next, and the Commissioner is directed to advertise the place, time and terms of sale, for forty days, in two newspapers published in Lexington, one published in Covington, in one published in Cincinnati, and in two published in the City of New York. But it shall not be necessary to set forth in the advertisement the terms of the sale as minutely and particularly as they are set forth in this judgment, but they shall be so set forth in substance, to inform persons contemplating a purchase, what securities and obliga-

tions the purchaser will be required to give, and it shall be sufficient that the advertisement be inserted once each week in each of said newspapers. And the Commissioner is directed to prepare and submit to this Court, during this term, for its approval, the advertisement he proposes to publish, and it is here provided that the failure to make the advertisement precisely as herein directed, shall not be a ground for quashing or refusing to confirm the sale, if the Court is satisfied that fair and proper notice of the sale has been given, and that the parties in interest have sustained no injury from such default.

If from any cause the sale shall not be made on the 5th day of October next, it shall be made on a day to be fixed by the Commissioner, after advertisement of the time, place and terms of sale, as before prescribed.

It shall be the duty of the Commissioner to make an inventory of the property of the said Company to be sold, and ascertain, as near as practicable, the interest and title of the Company in such property, and for that purpose the President and Directors of said Company are ordered to furnish him with such information as they possess in regard to the property of the Company and the Company's title or interest therein, and furnish him with such evidences of title as are in their possession or control. And for two days before the sale said inventory shall be kept in the Court in Lexington, or in the Clerk's office of this Court, and the Commissioner shall attend during said days and exhibit the same, and give information concerning the property, and the Company's title thereto and interest therein to all persons desiring to purchase. And he shall exhibit the same on the day of sale, and give in general terms a description of the property, rights, credits and franchises offered for sale.

The President and Directors are ordered to surrender to the Commissioner all said property, rights and franchises whenever by him demanded for the purpose of delivering possession thereof to the purchaser, and at the same time shall deliver to him all moneys, notes and evidences of debt, belonging to said Company at that time remaining in their hands, and render to him an account of their receipts and expenditures from this date until such surrender. They are also ordered out of the income of the said property to pay the interest that shall become due on the first mortgage bonds on the first September next.

This Court reserves full power by summary proceedings against the purchaser to enforce compliance with all the terms of sale, and until full payment thereof to coerce said purchaser to keep all the property purchased in good repair and order so as to do the business of the Railroad with safety and dispatch, and in case of default on the part of the purchaser in making payment or in complying with any of the terms of sale, or in keeping the property in good order and repair, may appoint a Receiver or order a sale thereof. And it is hereby ordered and provided that there shall be a lien upon all the property, rights and franchises sold, and upon all the incomes arising therefrom, for a full and complete compliance with all the terms of sale, which lien, however, shall be for the security of the several debts in the order of procedure hereinbefore adjudged and fixed, but no surety who pays money for said purchaser on any of the bonds said purchaser is required to execute for the payment of money, shall be subrogated to the lien for its payment, except as posterior and inferior to the lien for the compliance with all the terms of sale, to all parties in interest.

Inasmuch as the number of third mortgage bonds held by Bowler, Robbins, S. J. Walker, and S. W. Walker, at the commencement of this suit, does not appear, it is ordered that all the holders of third mortgage bonds produce them before the Commissioner on the 13th day of this month, and at the same time that the holders of the income bonds sold by Benton and Walker, before the 16th July, 1850, produce before him their said bonds, and that the Commissioner then and there, by proof on file in this cause, or then taken, ascertain the number of third mortgage bonds held by Bowler, Robbins, and said Walkers, at the commencement of this suit, and the number of bonds then held by others, and also identify the income bonds so sold by Benton and Walker, and the present holders thereof, and report the same to Court during its present term, and also ascertain and report the amount of interest in arrear on said bonds; and when said report shall be made and approved, the number and amount of bonds and interest so ascertained and reported shall be deemed to be fixed in this judgment, in the same manner as if said number and amount were herein recited.

It is further adjudged that the plaintiff, by the provisions of the second mortgage, is not only entitled to his legal costs, but also to his extraordinary costs, consisting of his expenses and reasonable compensation for his time and attention, which extraordinary costs shall be ascertained and taxed by the Commissioner before the day of sale, and shall be part of plaintiff's costs; but the Commissioner shall report his taxation of such costs, and the proof on which it is made, to this Court, for correction and approval, and if too much be allowed, this Court will reduce the same, and apply the excess to the payment of the debts, according to the principles of this judgment.

It is ordered that Wm. A. Dudley be appointed Commissioner to execute this judgment, and his allowance, hereafter to be made, shall be taxed as a part of plaintiff's costs, and paid out of the proceeds of sale. He will sell all the property, rights and franchises of said Company in one lot and not separately, excepting, [however, all money and evidences of debt belonging to said Company, concerning which a future disposition will be made in accordance with the rights of the parties as settled by this judgment, and in said sale shall be embraced all the rights of the Company in the leases from the Maysville and Lexington Railroad Company and from the Lexington and Danville Railroad Association, of the Road between Paris and Lexington and the Road between Lexington and Nicholasville, which can be passed by assignment, but subject to all the rights of said lessors, which shall not be impaired by said sale.

The Commissioner will deposit in the Northern Bank o

Kentucky, in Lexington, all obligations, bonds and securities, which he shall receive from the purchaser of the road, and all money, notes and evidences of debt, and also all deeds, leases and other evidences or muniments of title which he shall receive from said President and Directors.

The costs and expenses of sale shall be taxed as part of plaintiff's costs.

By this judgment it is decided that the first mortgage only secures four hundred bonds of \$1,000 each, and that the twenty bonds issued in excess of that number are not secured by it. But it is not exclusively settled, which of said bonds are excluded from said security. To enable, however, the purchaser and the President and Directors to make payments as herein ordered, it is adjudged that no payment of interest or principal shall be made under this judgment on the bonds purporting to be issued under said mortgage bearing seven per cent. annual interest numbered 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, until otherwise ordered by this Court.

A copy, attest,
JNO. B. NORTON, Clerk, C. C.

ALABAMA R. R. PROJECTIONS.

NORTHEAST AND SOUTHWEST ALABAMA R. R.

This road supplies another link, of about 290 miles in length, of that chain of improvements intended to connect the City of Washington with the City of New Orleans, in a direction as nearly conformable to an air line as the nature of the country will admit.

Its northeastern terminus is at the city of Chattanooga where it connects with the Georgia State road, the Tennessee and Georgia road, and the Nashville and Chattanooga road. Its southwestern terminus is at Meridian, about 130 miles above the city of Mobile, where it unites with the Mobile and Ohio road, and the Southern road.

The air-line direction of this road, between the great centers of political and commercial influence, and the many connections it makes with other roads, all of which must contribute to swell its business, sufficiently mark out its importance to the country at large. And should it never be extended beyond its southwestern terminus toward the city of New Orleans, it will still furnish, either by the way of Mobile or of Jackson, Miss., the shortest route between Washington and that city. On its general advantages I need not dwell. They are too obvious to escape the attention of any one at all interested in the improvements of the country. But its peculiar local advantages are less understood, and to these I wish to invite the attention of the public generally. They are detailed with great clearness in the various documents that proceeded from the pen of its first president, Dr. L. C. Garland, and from these I shall freely quote.

The advantages of the Northeast and Southwest Alabama railroad may be arranged into two classes; first, agricultural, and second, mineralogical.

I. AGRICULTURAL ADVANTAGES.

The section of the State to be traversed by this road is that which, for the most part, is the least favored with facilities for the exchange of the products of labor. Cotton is the only product that can bear transportation to market; and this only because of its compressibility, and of its growth being monopolized by the Southern States. And yet, from neither Jefferson, nor Walker, nor Blount, nor St. Clair, nor De Kalb, can a bale of cotton be placed upon the seaboard for a sum less than six dollars. When we connect with this the fact, that neither the climate nor the soil in those counties is well adapted to the cultivation of cotton, and that on an average five acres are required to produce one bale, need we wonder that, notwithstanding the proverbial economy and industry of the inhabitants, they are still comparatively poor; and that

the population in those counties bears such a small proportion to that of the State at large? By the census of 1850, the density of the population in the counties named was about eight to the square mile, while that of the State at large was about fourteen to the square mile, and that in some of the counties more highly favored with commercial facilities rose as high as thirty or forty to the square mile. Again, the wealth in the counties now under consideration, taking Jefferson as the sample, amounts to only \$94 for each white person, while in Greene it is as high as \$428 for each.

This state of things does not arise from any want of a capacity of production inherent in the soil and climate of these counties. For, in point of fact, few portions of the State are more highly favored in these respects. The mountains and ridges run parallel to each other, forming valleys of great length, and in many cases of considerable breadth; possessing, in salubrity of air, abundance and purity of waters, and fertility of soil, advantages not inferior to any found elsewhere in the State. The true cause of the sparsity and comparative poverty of the inhabitants is, the necessity of cultivating a plant which is not adapted to their locality, and the enormous expense that attends the ordinary exchanges of commerce. But emancipate them from this condition of things, by the construction of a railroad—enable them to change a system of agriculture which is rapidly exhausting their soil, without remunerating their labor—and to direct their industry to its proper objects, the cultivation of grains and the raising of live stock; and this portion of territory will soon become the most valuable and interesting in the State. In this connection, the tide of emigration which has for some years been strongly setting in from these counties to Texas and Arkansas, ought to arrest the serious attention of the enlightened statesman. If things are to continue in their present condition, another twenty years will result in an almost total abandonment of this part of the country. And if for the past two years this tide of emigration has been partially stayed, it has been from the hope of disinfranchisement through the construction of the Northeast and Southwest road. Nor are the other counties on the line of this road bordering upon the Bigbee and Warrior rivers, less interested in the completion of this work. The navigation of these rivers is imperfect and costly at best; but it is becoming more precarious every day, and is occasionally wholly inadequate to the transportation of agricultural products and general merchandise. Our seasons are sometimes abnormal, and there is reason to believe that the navigation of a stream must be impaired by the clearing up and cultivation of the country through which it flows. Of the rain that actually falls, a large portion is lost by evaporation from exposure to the sun and air, and a much larger portion is absorbed by the upturned and unloosened soil; so that comparatively but a small portion reaches the channels of the water-courses at all, and that which does, carries down such an excess of soil that it continually tends to fill up the bed of the streams.

It appears, therefore, that no portion of Alabama stands in so great need of improved facilities for effecting exchanges, as that proposed to be traversed by the Northeast and Southwest road.

We have considered the advantages of this work to the upper counties on the line, in an agricultural point of view only, which is by no means that of most interest and importance.

The country is broken, and as has been already intimated, the valleys only are well adapted to agricultural purposes. A very considerable portion of their territory will never be brought under the dominion of the plough. But it is here that we find deposited in enormous quantities those minerals of prime necessity, coal, iron, and lime, which may be made the basis of a degree of wealth and of a density of population far exceeding those of the best agricultural districts in the State.

This brings us to the advantages in a mineralogical point of view:

II. MINERALOGICAL ADVANTAGES.

According to the report of the State Geologist, the coal and iron of Alabama lie in an oblong basin, stretching from northeast to southwest, extending from the head of Wills' Valley on the northeast to the city of Tuscaloosa on the southwest, a distance of near 200 miles. The strata of this vein have been upheaved in the same general direction, so that their *strike* is always from northeast to southwest. Near the center of this basin, but a little south of it, there is a continuous series of limestone valleys, remarkable for their directness, gentleness of undulation, and fertility of soil. It is along these valleys that the Northeast and Southwest road is located; so that for 200 miles coal, iron, and lime, are abundant upon the immediate line of the road.—These valleys constitute the *anticlinal axis* of the geological system of the basin, in consequence of which the streams that rise in the valleys flow off to the right and left, furnishing practical routes for branch railroads penetrating into the heart of the coal beds on either side of the main road. Human wisdom could not devise, therefore, a plan of developing the wealth of this great basin, more suitable and effectual than that of laying down a road of the first class along this anticlinal axis. It would be as the spinal column to the human frame, and its tributaries as the ribs articulated to it. It is, therefore, legitimate to claim for this work a very peculiar relation to the mineral system of Alabama, and as such, to bespeak for it no common share of the public favor.

Before considering the advantages to the State at large of the development of its mineral resources, it may be necessary to shew that *there is at present a great demand for the products of our mines*, and that this is likely to be enormously increased in coming years; for if this were not so, all projects looking to such a development would evidently be premature. On this point, we submit the following considerations:

(a.) In the first place, steam has become the motive power of the whole civilized world. It is made in every branch of industry and art, to perform the labor of both man and beast, and is fast superceding the natural mechanical agents of wind and water. By the perfect control we have acquired over this power, through the recent improvements in machinery, it is applied to every mechanical purpose, from the drawing out of the gossamer fibres that enter into the finest fabrics, to the propulsion against wind and tide of the largest ships-of-the-line; and it is now spinning more cotton and wool, weaving more cloth, reducing, moulding, and polishing more metal, than could be done by all the laborers on the earth, with such hand implements only as were used 75 years ago. Since the invention of the magnetic telegraph, time has more than ever become an important element in trade. The transmission of products to points where a demand exists for them, is seeking to keep pace

with the rapid transmission of knowledge. The clipper is replacing the vessel of more sluggish form, and the steamship is rapidly replacing both. The principal commercial ports of the world are now connected by lines of steamships. The steam marine of the United States amounted, in 1852, to 1,390 vessels, with an aggregate tonnage of 417,227—of which, 96, with a tonnage of 91,476, were ocean steamers; and 529, with a tonnage of 121,023, were coast steamers. We do not here include the thousand steamers plying upon our rivers, as they generate their steam chiefly by the use of wood. It was but as yesterday that steam was employed upon the ocean, and the result shows that it is to effect an entire revolution in the coasting trade and foreign commerce of the world.

(b.) There is no probability that any motive power will ever be discovered, having the potency of steam, and, at the same time, its cheapness of production, and simplicity of application. The magnetic and galvanic forces are too costly—the expansive force of air has signally failed in the Ericsson; and if it should ever supercede steam as a motive power, it not the less requires the combustion of coal. Coal, therefore, lies at the basis of this wonderful development, and is the only form in which the combustibles are found in sufficient condensation to render them portable and efficient in the generation of steam for the purpose of oceanic navigation. As, therefore, the applications of steam are multiplied, so the demand for coal will be increased.

(c.) But especially is the demand for coal likely to be great at all ports of the Caribbean Sea and the Gulf of Mexico. Our race is expanding southward. Texas has been absorbed by the States; and such seems to be the ultimate destiny of the whole of Mexico and Central America. The great valley of the Amazon will, in all human probability, be brought under the dominion of Anglo-Saxon enterprise and industry. What a vast trade is, therefore, to go forward upon the waters that roll their waves almost into the mouths of our coal pits! Let any one look upon a map of the American Continent, and it requires but a glance to see, that where it is almost cut in twain, there is to be a commercial highway between the Atlantic and the Pacific oceans. It matters not whether the connection is to be by several railways or by ship canals; alike in both cases, the steam marine of the tropical seas is to be increased beyond all precedent, and is to create a demand for coal, that will tax the utmost capacity of American labor to supply. In this field of industry the Alabama collier will have a decided advantage. As compared with the coal of Pennsylvania, Ohio and Illinois, the coal of Alabama may be said to be already half-way to market. As to quality, it is not inferior to the best of them. As to quantity, it covers an area of more than 6,000 square miles, and is in several successive strata (8 or 10,) varying from 1 to 10 feet in thickness.

(d.) But this coal is in many places traversed by veins of iron ore of great thickness and richness. This creates a new demand for the coal at the pit's mouth. The application of coal to the smelting of iron has emancipated the iron manufacture. "Steam is prepared as the motive power; the forge-master, the founder, are no longer confined to the banks of rivers, or the depths of forests, far from the inhabited places. Industry has broken her fetters; commerce is set free in the interior. Gigantic furnaces arise, forges, bar-iron works multiply; iron receives every shape; and manufactories fill the world with machines." The

demand for coal in this point of view is limited only by the demand for iron.

(e.) And what is the demand for iron.

1st. There is the ordinary demand of iron in the forms of bar, bolt, and rod iron, and nails and hollow-ware, &c., which increases with the increase of population. And whence do we receive our supplies? From the furnaces, and forges, and rolling mills of Pennsylvania, New Jersey, and Maryland. And why should not our supplies come from the products of our own industry?

2d. There is the enormous demand for iron in the construction of railroads, which greatly exceeds the present capacity of the iron manufacture to supply. This demand is not likely to be diminished, especially in the South-western States, where the construction of roads has just been commenced.

3d, and lastly, there is the new demand for iron in the construction of steamships. Of the 153 steamers built in Great Britain during the year 1854, 117 were of iron. Of the sailing vessels, 10 were of iron. The like tendency to substitute iron for wood, is seen in the dock yards of the United States.

Indeed, so great is the demand for iron in this country, that we are the largest consumers of the exportations of this article from England. "During the ten months ending Nov. 5, 1853, Great Britain exported \$75,000,000 worth of iron, and by far the largest portion was taken by the United States. Of pig-iron the United States received 57,000 tons. Of bar, bolt, and rod iron, the United States took 263,530 tons; or nearly six times as much as Canada."—*Taylor's Statistics*.

This point being cleared up, we are now prepared to resume the consideration of the importance of such results to the State at large.

1. The first advantage to the State at large, is that of increasing the population and wealth of a sixth part of its territory, which can never be done without the development of its mineral resources. The relation of iron and coal to the wealth and population of a country, is best seen in the light of experience.

According to the best authenticated statistics, the product of the British coal mines is valued at \$96,000,000 per annum.

If to this we add the product of her iron ore, which is estimated at \$82,280,000, we shall have a total of \$178,280,000 per annum, an amount equal to the product of all the gold and silver mines of the whole world, including those recently discovered and opened in Australia. From the more fully reported statistics of Belgium, it appears that we may reckon one miner for every 130 tons of coal; at this rate, the colliers of England number 246,154; and if we allow as many as three souls supported on an average by the labor of each collier, the total population supported by coal mining in England, (not the traffic in coal,) amount to 738,462. From the census of 1850, the product of 1,165,544 tons of iron required the labor of 57,021 hands, which is about 20 tons to the hand. At this rate the product of British iron supports 110,000 laborers, or a population of 330,000 souls. Those engaged in polishing and giving to iron its thousand useful shapes, are not reckoned in this estimate, but those only who are engaged at the furnace and the forge. So that we have a total population of more than a million of souls sustained by the mining operations of England, to say nothing of still larger numbers sustained by the collateral employments to which coal and iron have given rise, and this within a district of country not very much larger than the State of Alabama.

But we have an equally striking example in the case of Pennsylvania, and particularly in the increase of the wealth and population of its two principal cities, Philadelphia and Pittsburgh.

At the beginning of the present century, Philadelphia was the first city of the Union, in point of population, wealth, and commerce. This was owing chiefly to the fact that before the period of canals, and railroads, and steamboats, it was the most accessible port to the young states growing up in the valley of the Ohio. Her commerce, however, was almost entirely destroyed by the policy of New York, which opened up along the valley of the Mohawk, a highway between the lakes and the Hudson. The cost of transportation from Buffalo to New York, which had been one hundred dollars per ton, was thereby reduced to seven dollars per ton. The lakes thus became the channel of communication between the States of Ohio, Indiana, and Illinois, and the Atlantic, and such they have continued ever since. The Western and foreign trade of Philadelphia declined as rapidly as that of New York increased, as appears from the following table:

Year.	Tonnage.		Imports and Exports.	
	New York.	Philadel.	New York.	Philadelphia.
1800.....	59,000.....	103,011.....	.....	.....
1810.....	250,000.....	125,000.....	.....	.....
1820.....	265,000.....	84,000.....	37,000,000.....	21,000,000
1830.....	380,000.....	72,000.....	56,000,000.....	13,000,000
1840.....	450,000.....	103,944.....	92,000,000.....	14,000,000
1850.....	836,000.....	206,497.....	198,000,000.....	36,000,000

With such a reduction of foreign trade, we should expect to find a corresponding diminution in the wealth and population of Philadelphia; or if an increase at all, one by no means comparable to that of New York. But such is not the fact, as the following table shows:

Year.	Population.	
	New York.	Philadelphia.
1810.....	96,373.....	106,281
1820.....	123,706.....	137,497
1830.....	203,007.....	178,961
1840.....	312,712.....	258,832
1850.....	512,394.....	409,353

How is this anomaly to be explained, to wit: That the city of Philadelphia has continued to rival New York in population and wealth, notwithstanding its loss of the Western and foreign trade? On the loss of their foreign trade the people of Pennsylvania wisely directed their attention to the mineral resources of the State. An attempt was made to recover the Western trade by a series of canals and roads leading from Philadelphia to Pittsburgh. But the heterogeneous character of the line defeated its purpose. It, however, formed a basis of a system of improvements ramifying into the iron and coal districts of the State.—Upon these works the State has expended \$40,000,000, and such as are completed prove to be profitable investments. No other minerals but those of iron and coal could have warranted such an enormous outlay of money to bring them into market, and have given so large a dividend in return. The results of this system of development have been of the most striking and satisfactory character. In the year 1843, 1,500,000 tons of bituminous coal were mined, and 5,195,151 tons of anthracite coal. Their market value in Philadelphia was near \$30,000,000. Their transmission coastwise explains the rapid increase in the tonnage in that city from 1830 to 1850. In 1850 there were also 350 iron furnaces in blast; and in 1853, 368,056 tons of pig iron were produced, valued at \$23,921,960. (*Childs on Iron*.) Here, then, is a total product of \$50,000,000 annually from these sources, ex-

clusive of the numerous branches of industry to which they have given rise. The population supported by the production of iron alone, is estimated at 269,616 souls. (*Taylor*, p. 419.) This is the secret of the rapid growth of the State of Pennsylvania, and the prosperity of her principal commercial mart. The influence upon the wealth and population of the mining district itself, is not less than that upon the city of Philadelphia. Take the county of Schuylkill as an example. In 1842, at a public meeting of persons engaged in the coal trade, a report on the coal statistics of that county was made, by which it appears that the capital invested amounted to \$17,526,000. Population engaged in, or entirely dependent on the coal trade, 17,000 persons. Number of horses employed in boating, and at the collieries, 2,100. Agricultural products, consumed annually, \$588,572. Merchandise consumed, \$918,325. And all this had originated in fifteen years. (*Taylor*, p. 362.)

Pittsburg is, however, a yet more striking example of the relation of coal and iron to wealth and population. Its prosperity has been wholly derived from the trade in these articles, and the arts and manufactures immediately consequent upon them.

In 1825 the consumption of coal in this city was 35,714 tons. In 1833 it was 255,910 tons. In 1824, there were 18 iron foundries, 11 rolling mills, 120 steam engines at work. In 1838, 300 steam engines and as many factories; and the amount of coal consumed and shipped, 357,140 tons. In 1842, the coal produced reached 420,000 tons; the number of steamboats owned in the district was 89. In 1846, the production of coal was 678,572 tons. In 1853, it exceeded 1,000,000 of tons. Let us now note the progress of population:

1753.....	No white man lived there.
1812.....	5,748 souls.
1840.....	40,000 "
1850.....	83,600 "

Taylor's Statistics, p. 336.

In 1854, there were in this city 17 large rolling mills; 12 large foundries; 20 glass manufactories; 20 engine and machine shops; 5 large cotton factories; 4 large flouring mills; and 100 steam engines, besides those above named.—*Taylor*, p. 337.

A more striking example could not be given in illustration of our proposition of the capacity of iron and coal to increase the population and wealth—furnishing a population, too, usually characterized by industry, activity, frugality, and a considerable degree of moral and intellectual culture.

We think it can not be necessary to pursue this topic further, in order to establish the value of our coal and iron deposits. On this point, no man, who looks at the facts, can entertain a doubt. But some may question whether such results would be realized in our own State. If there were no demand for our coal and iron, we might well doubt the result. But we hope that enough is said above to show that the demand is not only great already, but that it is becoming greater and more urgent every year. But it may be said that we possess not the skill. Grant it. And the reason is, there has been no demand for it.—Bring together the conditions requisite to a successful application of capital and labor to our iron and coal, and they will soon be appropriated to those objects. Already some of the most experienced iron masters of the Middle States have their attention turned to the extraordinary facilities we possess for the manufacture of iron, and awaiting with interest the result of the policy of this company. On these points we have, therefore, nothing to fear, and if, in the next twenty years, we shall reach only to one fourth of the productions of

Pennsylvania at present, our coal and iron will add \$12,000,000 annually to the wealth of the State, and give support to 200,000 souls.

II. But the experience of the world is to be belied, if the development of our coal and iron does not cause to spring up a manufacturing interest that will advance *pari passu* with the development itself. Machinery is mostly of iron; steam is its motive power; the coal at once reduces the iron ore, and generates the steam; the materials of manufacture are already at hand; and such as are not, our State is admirably adapted to produce. Cotton is our own staple; no portion of America is said to be better adapted to the raising of wool, than the belt of pine hills between the valley of the Tennessee River on the north, and the prairie formations on the south. Where can you find better timber, of pine, walnut, cedar, chestnut, and oak, than that covering the entire coal basin of the State? Here are the materials, then, singularly grouped together, for a vast manufacturing interest. Why should we not make our own nails, and bar, bolt, and sheet iron; our own castings and machinery? Why should we not weave and spin our own cotton and wool? Why should not the houses and furniture of our cities and towns be made in the heart of our forest, and transmitted to the points where they are to be put up for use?

Chattanooga is but a town of a day's growth, as remote from the coast as it is possible to be: and yet it is framing the houses for Nashville and Augusta, and has two large furniture establishments worked by steam, which supply in part the wants of those cities and other towns in the interior. Our mild climates allows the comfortable performance of labor in the open air during winter, and when we have the iron furnaces, and foundries, and rolling mills, and machine shops at hand, why should not Tuscaloosa, which, like Pittsburgh, stands upon a bed of coal, and on the banks of a river, which, in its floods, can bear a 74 gun-ship to the Gulf, become a steamboat yard for the supply of our Southern waters? In point of coal, or iron, or timber, or cheapness of living, and, consequently, in cheapness of labor, wherein is it inferior to Pittsburgh or Cincinnati? At the same time it is in climate vastly superior to either. These results will of necessity follow in course of time, because capital will seek the most profitable channels of investment; and such are those indicated.

In all these improvements the whole State is interested. Millions of dollars that now go out of the State for coal and iron in its various forms, machinery, cotton and woolen fabrics, &c., would be kept in circulation at home, supporting a greatly increased population, and enhancing the wealth of the whole State. Our seaports will be made coaling stations for ocean steamers, and the points for shipping coal to the various naval stations in the West Indies, and on the coast of Central America. And we should have, indeed, a union of the plough, loom, and anvil.

All the foregoing advantages must result, sooner or later, from the completion of this road. But they will be precipitated at once upon the country, if the company can succeed in carrying to a successful issue their declared policy. Their object is to avail themselves of the facilities existing on the line of the road for the manufacture of the iron necessary to clothe it. Mills will be erected upon a scale to turn out about 10,000 tons of iron per annum. In connection with these, it is proposed to erect workshops for the construction of all the rolling stock of the company, with the

exception of the first suite of locomotives.—Here is at once the nucleus of a vast business, in which the whole country is interested. After the clothing of the road, these mills could offer to other railroad companies better iron, and at cheaper rates than they could procure in England, carriage being taken into the account; and if this be not so, there is no probability that the works would lack for patronage, for if railroad iron should not be in demand, a trifling expenditure would convert the rail mills into others adapted to turn out iron in its numerous commercial forms, which would find a ready market in the ports of the Gulf.

When we consider the numerous advantages to be derived from this work, we are not surprised to learn that the people resident along the line, have sustained it with a noble generosity. Ample provision has been made for the grading, culverting and cross-tieing of about 220 miles of the whole 285 miles. This includes all the heavy work upon the road, and the two bridges, the one over the Warrior, and the other over the Bigbee. About 100 miles at the lower extremity, and 67 at the upper, are nearly ready for the iron. Up to this point, the company has not contracted a dollar of debt. They are now seeking for subscriptions to an extent to make full provision for the entire road-bed; so as to be relieved from the necessity of creating a debt beyond what may be required for the manufacture or for the purchase of rails. It would seem from the policy of the company, from the magnitude of its local subscriptions, and from the unrivaled connections of this road, that no enterprise of the kind deserves more fully the confidence and support of the country, nor more richly the attention of capitalists.—*DeBow's Review*.

MONETARY AND COMMERCIAL.

The demand for money, during the past week, has been good, but the last few days have witnessed an improved feeling, and capitalists show more confidence than heretofore. Good paper has been taken readily by regular houses, at 10@12 per cent; that of lower grade is difficult of sale. The supply of Eastern Exchange is good, and the demand freely met at $\frac{1}{2}$ prem.; buying 40@45 on New York and Philadelphia, 37 for Baltimore and Boston. Gold is dull, 30@35 premium buying, and 40@45 selling. In New Orleans sight, but little is doing; rates, $\frac{1}{2}$ dis. buying, par selling.

The New York *Courier and Enquirer*, of 15th, says: "The money market shows decidedly more favorable features. Business paper of the best order is taken at 6 $\frac{1}{2}$ and 7 per cent. for short dates, an 17@ $\frac{1}{4}$ for 3 and 4 months.—'On call' the rates are somewhat better for the borrower. To favored parties the rates are 6@6 $\frac{1}{2}$, while the more needy have to pay 7@7 $\frac{1}{2}$." Sales at New York Stock Board have been light, but prices have improved in correspondence with the improvement in the money market.

SALES AT THE NEW YORK STOCK BOARD.—Aug. 15.

\$5,000 California State 7's, Bonds.....	81
33,000 Tenn. 6's, ".....	87
2,000 Louisiana 6's.....	87
6,000 Missouri 6's.....	82 $\frac{1}{2}$
6,000 do.....	82 $\frac{1}{2}$
7,000 Virginia 6's.....	93
16,000 do.....	93
5,000 N. Y. Cent. 6's.....	90 $\frac{1}{2}$
4,000 Erie R. R. 1st Mt. Bonds.....	82
3,000 Erie 4th Mt.....	38 $\frac{1}{2}$
3,000 Mich. Cent. R. R. 8's, 1st Mt. S. F. C. Bds.....	84
2,000 do.....	83 $\frac{1}{2}$
5,000 Ills. Cent. R. R. Bds.....	84
6,000 do.....	85 $\frac{1}{2}$
5,000 L. Crosse & M. L. G. B. R.....	154
100 Shares N. Y. Central R. R.....	71 $\frac{1}{2}$
10 " Erie R. R.....	52
50 " Hud. River R. R.....	31 $\frac{1}{2}$
100 " Harlem R. R. Pref.....	24 $\frac{1}{2}$
100 " Reaping R. R.....	43 $\frac{1}{2}$
650 " Michigan Central R. R.....	43 $\frac{1}{2}$
100 " Panama R. R.....	115
170 " Ill. Cent.....	65
50 " Clev., Col. & Cin.....	91 $\frac{1}{2}$
50 " Clev. & Titts.....	6
250 " Gal. & Chic. R. R.....	54 $\frac{1}{2}$
588 " Chi. & Rock Is.....	62
100 " Hud. River R. R.....	34 $\frac{1}{2}$
200 " Mich. S. & N. Ia. G. S.....	21 $\frac{1}{2}$

The following is a statement of the new freight tariff of the competing lines.

No change is made in Third and Fourth Class Freights. The rates here given are in all cases from New York:

	1st.	2d.	3d.	4th.
Chicago, Ill.	1 35	1 00	62	47
Dunleith, Ill.	1 71	1 31	90	68
Fulton, Ill.	1 64	1 25	85	64
Peoria, Ill.	1 60	1 22	80	62
La Crosse.	1 81	1 41	1 00	78
Prairie du Chien.	1 81	1 41	1 00	78
Milwaukee.	1 35	1 00	62	47
Muscatine, Iowa.	1 75	1 35	82	72
Quincy.	1 70	1 25	77	57
Keokuk.	1 90	1 45	92	72
Hannibal.	1 30	1 25	87	67
St. Joseph.	2 40	1 85	1 17	87
Iowa City.	1 93	1 46	98	76
Fairfield.	1 93	1 46	98	76
Alton, Ill.	1 70	1 25	77	57
St. Louis.	1 80	1 30	82	52
Caio.	1 80	1 30	92	62
Cincinnati.	1 25	95	57	44
Columbus.	1 09	84	53	41
Newark.	1 09	84	53	41
Mansfield.	1 05	80	53	41
Detroit.	1 05	78	50	38
Lafayette.	1 05	78	50	38
Lafayette.	1 35	1 00	63	48
Fort Wayne.	1 20	88	56	53

H. J. Jewett, Esq., Receiver of the Central Ohio R. R., filed his second Report with the Clerk of the United States Court yesterday, from which we make up the following account of receipts and disbursements of the road during the month of June:

EARNINGS.	
From passengers.	\$19,039 53
From freight.	21,689 61
From express.	2,290 00
From mails.	893 53

EXPENSES.	
Transportation Department—	
Passengers.	\$3,511 78
Freight.	6,063 50
Fuel.	4,377 79—\$13,953 16

Machinery Department—	
Repair of passenger cars.	\$2,012 97
Repair of freight cars.	2,001 37
Repair of passenger engines.	309 66
Repair of freight engines.	3,185 27—\$7,580 27
Road Department.	\$10,466 40
General expenses.	3,273 04
Shed at Columbus and shop machinery.	575 73

Total expenses.....\$35,887 00

The following is a statement of the earnings of the Pittsburg, Fort Wayne and Chicago Railroad, for July, compared with the same month last year, viz:

	1859.	1858	Increase.	Dec.
From Freights.	\$22,870 73	\$51,536 76	\$11,333 97	
“ Passeng's	59,231 04	51,135 53	8,095 59	
“ Mails.	7,825 00	4,482 26	3,342 71	
“ Miscel's.	125 00	635 97		510 27
	\$130,051 77	\$107,789 87	\$22,261 90	

RECEIVER'S SALE.

BY virtue of a Judgment of the Court of Common Pleas of Muskingum County, Ohio, rendered in a certain case therein pending, in which the Clinton Bank of Columbus is Plaintiff, and Douglas, Smith & Co., and others, are Defendants, I will offer for sale, at the Court House, in the City of Zanesville, in the said Muskingum County, at the hour of one o'clock, in the afternoon, on the 13th day of September next, the following described parcels of land, situate in the Western Addition to the said City of Zanesville, as the same is designated and delineated upon the plat of said addition, recorded in the Recorder's office, of said county, in the Record of Plats, Book No. 1, page 13, &c.; that is to say, Lots Nos. 1, 2 and 3, of square 17, in said “Western Addition,” appraised at \$150 each. Lots Nos. 4, 5 and 6, of said square 17, together with the strip of land between the south-eastern ends of the said lots, and lots Nos. 10, 11 and 12, in the said square, said strip of land being about 16 feet wide, with the buildings erected on the said lots and strip of land, and the fixtures and appurtenances thereunto belonging, appraised at the sum of \$6,500.—There are erected on the said lots a brick shop, for the manufacture of passenger cars, 120 feet by 50 feet, roofed with slate, and also a wood rack shop, 120 by 40 feet; steam engine and Boilers; 2 Daniels' Planing Machines; 1 upright saw; 1 Turning Lathe, Shafting, Cones, Pulleys, Hangers, &c., connected with said machinery.

Lots Nos. 7, 8, 9, 10, 11 and 12, of said 17th square, with the buildings erected thereon, and the fixtures and appurtenances thereunto belonging, appraised at \$7,000. There are erected on said parcels, a Brick Machine Shop, 80 feet by 40 feet; a Forge Shop, 40 feet by 40 feet, containing 4 forges; a Carpenter Shop, 120 feet by 26 feet. Foundry buildings, one Lathe, 6 feet wide; 1 Boring Machine; 1 large Screw Cutting Machine; 1 Planing Machine; 3 Hand Lathes; 1 large Drill Press; 2 small Drill Presses; 1 wheel press; 1 Foundry Fan; 2 Screw Cutting Machines; 1 small Drill Press; Shafting, Pulleys, &c., used with said machinery.

Lots Nos. 1, 2, 3, 7, 8, 9, 10 and 11, of square 21, in said Western Addition, appraised at \$150 each.

Lot No. 4, in said square 21, on which is erected small dwelling house, appraised at \$250.

Lots Nos. 5 and 6, in said square 21, with the buildings thereon, and the fixtures and appurtenances thereunto belonging, appraised at \$800, on which lots is erected a large Foundry building, with Crane, Cones, &c.

Lot No. 12, in said square 21, on which is erected a stable, appraised at \$250.

Lots Nos. 1, 2, 3 and 4, in square 16, in said Western Addition, on which is erected a large frame building, appraised at \$1,000.

Lots Nos. 5, 7 and 8, in said square 16, appraised at \$150 each.

Lot No. 6, in said square 16, appraised at \$175.

The said parcels of land are situated on the line of the Central Ohio Railroad Company, on the west side of the Muskingum River, and immediately opposite the city of Zanesville, and formerly occupied, in part, by the Machine Shops, Foundry, Car Manufactory, &c., of Douglas, Smith & Co., known as the “Muskingum Works.” The “works” are well arranged and convenient, and have capacity for a force of from 100 to 150 men. The location is healthy, and the facilities for procuring pig iron, coal, &c., render the location one admirably adapted for such “works.” Terms Cash.

And I will also, on the 14th day of September, 1859, at one o'clock, P. M., at the said “Muskingum Works,” offer for sale the following personal property used in said “works,” to wit:

2 Axle Lathes, 22 inch swing; 1 Axle Lathe, 26 inch swing; 1 Slide Lathe, 20 inch swing; 1 Slide Lathe, 15 inch swing; 1 Slotting Machine; 1 small Slide Lathe; 2 Slide Rests; 1 Grind-stone, with shafts and fixtures; 8 Blacksmith vices, work benches and clamps; 1 Screw Cutting Machine, No. 40; 12 large Anvils; 13 sets Blacksmith Tools; 2 Ripping Saws; 1 Cut-off Saw; 1 large and 1 small Trenching Machine; 1 Tongue and Grooving Machine; 1 Mortising and 1 Boring Machine; 1 Caul.

Terms Cash.

JOHN TAYLOR, Jr., Receiver.

Aug. 4, 15

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co., Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase.

Ag. 4, m. 3.

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANA OR SANDOVAL

FOR

Decatur, Springfield,
Bloomington, Peoria,
Burlington, Quincy,
La Salle, Rock Island,
Dixon, Galena,
Prairie du Chien, St. Paul, and
St. Anthony,
And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANA for all the above points. Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all

TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,

Gen'l Southern Agent, Cincinnati,
W. P. JOHNSON,
Gen'l Passenger Agent, Chicago.

June 21, 1859.

Cincinnati, Hamilton and Dayton



RAILROAD.

FOUR TRAINS

LEAVE THE SIXTH STREET DEPOT DAILY.

TRAINS RUN THROUGH TO RICHMOND, LIMA, SANDUSKY, AND DELAWARE WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND NORTH-WESTERN CITIES.

(Columbus time, which is seven minutes faster than Cincinnati.)

G. A. M. EXPRESS TRAIN—For Cleveland and Pittsburg, via Delaware, makes close connection at Crestline for Pittsburg, Baltimore, Philadelphia, and New York; and at Cleveland for Dunkirk, Buffalo, Boston and New York. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 7:30 P. M., Quincy and Galena at 7 A. M. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Muncie. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

S. A. M. MAIL TRAIN—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STEAMER FOR DETROIT; at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at DELAWARE with the C., C. and C. Road, for Cleveland and points East. Also connects with Junction Railroad at Hamilton for Oxford.

4:30 P. M. TRAIN—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Also, connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago. Also connects with Junction Railroad at Hamilton for Oxford.

G. P. M. TRAIN—For Dayton, Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 8 A. M.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; at the new Ticket Office on West side of Vine street, between the Post Office and the Burnet House; or at the Sixth Street Depot.

D. McLAREN, Superintendent.

FREEDOM IRON COMPANY,

MANUFACTURERS OF

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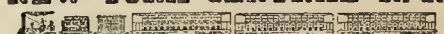
This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works.

June 9.

New Time Table

OF THE

NEW YORK CENTRAL R. R.



Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp., 7:40 A. M.	7:00 P. M.	7:00 P. M.
Mail, 9:10 A. M.	12:50 A. M.	
New York Exp., 11:15 A. M.	9:40 P. M.	9:40 P. M.
Night Exp., 5:00 P. M.	4:00 A. M.	4:00 A. M.
Utica Accom'n., 6:00 P. M.	Ar. U. 10:00 P. M.	
N. Y. Mail, 11:15 P. M.	10:00 A. M.	10:00 A. M.
Leave Buffalo.	Leave Bridge.	Ar. Albany.
New York Exp., 5:15 A. M.	5:15 A. M.	3:30 P. M.
Steamboat Exp., 8:30 A. M.	8:00 A. M.	8:00 P. M.
Mail, 11:15 P. M.		2:30 P. M.
Cleveland Exp., 6:00 P. M.	6:00 P. M.	4:40 A. M.
Cincinnati Exp., 11:00 P. M.	11:00 P. M.	8:30 A. M.
Utica Accom'n.,		10:00 A. M.

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

SOLE IMPORTERS.
PROSSER'S PATENT SURFACE CON-
DENSERS for high pressure steam, with sea or
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sinks, tube end cutting bars, expanders, tube scalers,
steel wire and whalebone brushes, pull lever wrenches,
tubes—plain or enameled, screwed together for Artesian
Wells, Hollow Slabs for various purposes, Steel for
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BUSH & LOBDELL, Wilmington - - - - - Delaware MANUFACTURERS OF CHILLED WHEELS

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TIRES,
For R. R. Cars & Locomotive Engines,
ARE PREPARED TO

Execute Promptly Orders to any Extent
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CELEBRATED WHEELS,
EITHER SINGLE OR DOUBLE PLATE,
WITH OR WITHOUT AXLES.

WHEELS FITTED
To Hammered or Rolled Axles.
In the best manner, at the shortest notice, and on the
Most Reasonable Terms.

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POST-OFFICE GUIDE! For Post-Masters and Business Men.

CONTAINING

A Complete List of Post-Offices in the United States
and Territories, arranged by States and Counties; A
Complete List of all Distributing Post-Offices; Rates
of Foreign and Domestic Letter Postage; Rates of
Printed Matter, Transient and Regular; Abstract
of the Laws and Regulations of the Post-Office De-
partment, &c., &c.

COMPILED BY E. PENROSE JONES,
Late Assistant Post-Master at Cincinnati.

Price Twenty-Five Cents.

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January, 1859. }

This work has been carefully compiled and corrected by
E. PENROSE JONES, Esq., late Assistant Post-Master of the
Cincinnati P. O., from the Records in this Department, and
other sources, and contains the most complete list of Post-
Offices, especially of the Western, North-Western, and
South-Western States, yet published.

MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

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The entire matter is kept standing in type, and as the com-
piler is promptly advised of all New Offices, Changes and
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up to the last day of publication, an advantage possessed
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Observe, That this list is arranged by States and Coun-
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important improvements, at a reduction on former prices;
and to meet the demand for a good, low-priced FAMILY
MACHINE, have introduced a new style, working upon the
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Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALIKE ON
BOTH SIDES, impossible to unravel, and leaving no chain or
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Send or call for a circular, containing all particu-
lars, prices, testimonials, etc.
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1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th
Corby, Gossin & Co.'s make, for sale very
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TRABER & AUBERY,
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Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite
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Companies, Manufacturer
Distillers, Miners, and the pub-
lic generally to these Pumps
as the best Pump now in use
and acknowledged by all who
have used them to be perfect-
are simple in their construc-
tion, compact, durable and not
likely to get out of order; well
adapted for Steamboats, Rail-
road Water Stations, Distille-
ries, Breweries, Furnaces,
Mills, Factories, Wells, Cin-
terns, Stationary Fire Engines, Garden Engines and for
all purposes where a Pump can be used. Also, for forc-
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rapidly.

Also, McGowan's Patent Ball Valve Pump, designed
for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings
Lead, Copper and Gas Pipe furnished at the west ma-
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Full and perfect satisfaction guaranteed in all cases,
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Orders thankfully received and promptly filled at the
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SILVER MEDAL. (The highest prize) awarded
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MOSELEY'S TUBULAR WROUGHT IRON



ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE
now been fully tested in this vicinity, and it is
universally conceded that they can not be excelled.
The Roofs, are wholly of Wrought Iron, or mixture of
Wood and Iron; Sheeting always Iron.

The bridges are wholly Wrought Iron except the floor,
which is wood, like the floors of ordinary Bridges.

We are prepared to make these structures in any
quantities, at prices about as follows:

Railroad Bridges, 80 feet span, 8,000 lbs., \$17 50 per
foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs.
\$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100
square feet, part wood and part iron, from \$12 to \$20
per square.

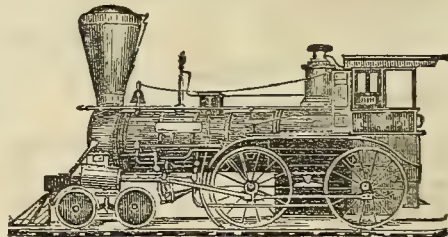
Increase of span of bridges, or width of buildings
makes an increase of price, but the increase in price is
no more than the increase of wooden structures.



We can furnish iron of every size to work into
Bridges and Roofs, and Railroads or other companies
buying the right to use them and the iron of us, can
make their own structures, one third less than the
above prices. Our structures weigh only from 1-4 to
1-10 that of wood; difference in freight in a long dis-
tance buys our work. In a few days we will have at
our factory, 497 West Third Street, in this city four
different specimens of our Roof, where the public can
inspect them to their satisfaction. We beg them to
give us a call, as all our work is warranted, and we ask
no pay on ordinary jobs until the work is done and ap-
proved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O.
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CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotiv
equal in efficiency and durability to the best Eastern
manufacture. Also, Shaping and Slotting Machines
suitable for railroad shops. Also, all kinds of heavy
forging and casting done at short notice. Also, bolts for
bridges cut with dispatch.
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P. DUDLEY.

President of the Board,

Jan. 5th,

The Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:
Thursday Morning, Aug. 25, 1859.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
OFFICE—No. 167 Walnut Street.
SUBSCRIPTIONS—\$3 Per Annum, in Advance.
To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

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A square is the space occupied by ten lines of Nonpareil.
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If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.
If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.
If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.
Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

The European Agents for the *Railroad Record* are MESSRS. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

LONG ISLAND R. R.—The work on the new track, from Jamaica to Hunter's Point has been commenced.

On Thursday last a terrible explosion of a locomotive occurred on the South Carolina R. R., which was attached at the time to a tender only. The engine was blown almost to atoms, and all on it, five in number, instantly killed, their bodies having been horribly mutilated.

AMERICAN RAILROAD IRON.—The assertion that American railroad iron is cheaper than that derived from England, in consequence of its superior durability, has often been made, but there have been doubts on the subject in some minds, the majority of men thinking that low priced articles are necessarily cheaper than those of a higher original cost. A proof has recently been afforded of the truth of the declaration with respect to the railroad iron of Pennsylvania, by an experiment that has been made on the Central Railroad of Georgia. In 1856 the track was supplied with iron, one side being furnished with American and the other with English rails. They were both identical in size and appearance, and care was taken to procure from the English market the best kind of iron. After an experience of two years, the General Superintendent has made a report on the subject, and it is in favor of the American iron. This is good news, and the important fact should be known to all those persons who are concerned in railroads.

PRACTICAL OPERATIONS OF RAILROADS.

In our last number we analyzed and examined the results of Railroads in their *practical operations*, as exhibited in the Reports of the Cincinnati and Columbus line. We now continue this examination, by analyzing the operations of two or three other Roads. By a close analysis of several roads, we shall be able to determine, with remarkable accuracy, in what elements, railroads either gain or lose, and in what way they may be improved.

1. CINCINNATI, HAMILTON AND DAYTON RAILROAD.—To furnish the operations of this road, we compare its elements in 1855 and 1858.

Thus:

	1855.	1858.
Cost.....	\$3,150,607	\$3,582,800
Cost per mile.....	52,500	60,000
Capital paid in.....	2,100,000	2,155,000
Debits.....	1,429,800	1,427,000
Locomotives.....	24	
Passenger Cars.....	37	
Freight and Baggage Cars.....	445	
Gross Receipts.....	\$483,620	\$467,944
Gross Expenses.....	234,717	214,383
Net Receipts.....	\$248,903	\$253,561
Through Passengers.....	19,850	51,035
Way Passengers.....	350,339	303,900
Aggregate.....	370,189	353,935
		For 1857.
Receipts from Passengers.....	\$259,914	\$231,571
" " Freight.....	211,562	268,800
	1855.	1857.
Oil, etc.....	\$7,935	\$10,556
Repairs.....	80,030	73,000
Fuel.....	30,476	34,000
Employees.....	92,308	89,047
Miscellaneous.....	23,000	15,000
	1855.	1857.
Oil.....	3 per cent.	4½ per cent.
Repairs.....	24 " "	34½ " "
Fuel.....	13 " "	15 " "
Employees.....	40 " "	39 " "
Miscellaneous.....	10 " "	7 " "

The above elements enable us to see very nearly the exact operations of the Cincinnati, Hamilton and Dayton Road. We first observe that for three or four years, there has been comparatively but little change in the Cin., Ham. and Dayton Road. In fact, being but sixty miles in length, and passing through a thickly settled country, and cultivated lands, where resources are well developed, there can be no change in its results, except such are gradual. There are, however, two new tributaries to it, which will, no doubt, add largely to its receipts. One of these—the *Dayton & Michigan Road*—is just opened to Toledo, and will, beyond doubt, make an efficient ally of the Cincinnati and Dayton. The other is the *Juncton*, which is now completed to Oxford, and soon will be to Connersville and Indianapolis. Undoubtedly this Road will also contribute largely to the increase of the trunk line.

The results in regard to income are:

In 1855, net.....	\$248,903
In 1858, net.....	253,561
Per cent. on cost, 1855.....	.8 per cent.
Per cent. on cost, 1857.....	.7 per cent.

Notwithstanding the net income is a little larger, the actual profit is less.

This difference, however, is *apparent* only. In 1855, there was a large floating debt, and

considerable steamboat property, which has since been charged up to cost, and makes part now of the bonded debt. On the whole, the increase and profits of the Company have remained about the same.

In regard to the expenses, more than one third consist of repairs. On this, we may repeat what we have said, in our former article, that there is room in this department for economy, and probably much improvement will be made.

2. OF THE EATON AND HAMILTON RAILROAD. This road, it is known, is mainly a tributary of the Cincinnati, Hamilton and Dayton; but, also, connects with the Indiana Central, at Richmond, Ind. We make the following comparison:

	1854.	1858.
Cost.....	\$1,026,000	\$1,403,020
Cost per mile.....	27,600	27,600
Capital paid in.....	289,245	453,450
Debits.....	736,283	909,670
Locomotives.....	2	6
Passenger Cars.....	5	5
Freight and Baggage Cars.....	55	72
Gross Receipts.....	\$89,855	\$151,000
Gross Expenses.....	30,745	103,000
Net receipts.....	\$59,109	\$48,000
Number of Passengers.....	76,559	82,605
Receipts from Passengers.....	\$39,570	.....
" " Freight.....	50,284	.....

In the year 1854, the road was just finished, and did not include six miles which were included in 1858, viz., from Eaton to Richmond.

The Report of 1858, shows that the Road is increasing its business, the gross receipts being 65 per cent. more than in 1854. The receipts per mile are now \$3,600; an increase of 30 per cent. more on its gross business will allow it to make handsome profits. The present net receipts are about 4 per cent.; and if they shall reach 7 per cent., a dividend equivalent to that may be made. We have not the data on which to ascertain the rate per cent. of each class of expenses; but may safely assume it at the same with that of the Cincinnati, Hamilton and Dayton Road.

3 OF THE CLEVELAND, COLUMBUS AND CINCINNATI RAILROAD.—This is one of the most important roads in Ohio or the whole country, and fortunately, it makes out detailed and accurate statistics, from which we make fair comparisons from year to year. The following are the results:

	1855.	1858.
Cost.....	\$4,613,792	\$4,752,319
Cost per mile.....	34,200	35,000
Capital paid in.....	4,547,020	4,746,420
Debits.....	95,400	90,400
Locomotives.....	39	42
Passenger Cars.....	32	31
Freight and Baggage Cars.....	413	439
Gross Receipts.....	\$1,290,295	\$1,149,741
Gross Expenses.....	558,239	635,241
Net receipts.....	\$731,056	\$514,740
Through Passengers.....	79,717	57,729
Way Passengers.....	333,849	175,258
Receipts from Passengers.....	\$501,256	.....
" " Freight.....	789,293	.....
Miles run by Passenger Trains.....	298,590	240,740
Miles run by Freight Trains.....	304,138	286,642
Decrease on Passenger Trains.....	.....	57,850
" " on Freight Trains.....	.....	17,496

The following is a return of freight transported, viz:

In 1855—tons.....	305,551
In 1858—tons.....	255,648

	1855.	1858.
Merchandise.....	105,055 Tons.	100,000 Tons.
Butter.....	1,030 "	1,027 "
Cheese.....	2,078 "	3,659 "
Wood.....	1,677 "	1,154 "
Hogs and Sheep.....	343,000 No.	230,794 No.
Cattle and Horses.....	62,155 "	65,182 "

The proportion of running expenses in 1855 were as follows, viz:

Oil, Tallow, and Waste.....	3 per cent.
Repairs.....	37 "
Fuel.....	10 "
Employees.....	36 "
Miscellaneous.....	14 "

These proportions are not far different from those of the other Companies, whose accounts we have compared.

The profits of this Road have been large. For the year we have given above, the results are:

In 1855, net.....	\$731,056...	15 per cent.
In 1858, net.....	514,740....	11 "

This road divided, therefore, more than a fourth of its entire capital in two years, and may, therefore, be regarded as one of the most profitable roads in the world. Notwithstanding it carries an immense number of passengers, yet, the freights are the basis of its profits. In the last four years, the aggregate receipts have declined, (probably from the completion of the Toledo Road) but the freights have declined much less than the passengers. The stock transportation is very great, and while other classes of products have diminished, that has increased. More than *three hundred thousand cattle, sheep and hogs were carried over this road on their way to the East.* This business will increase, for it is a good one for all parties.

[For the Railroad Record.]

OBSERVATIONS ON THE DANGERS AND DEFENSES OF OUR MARITIME CITIES.

The great gun constructed by Urban for Mahomet II. to aid in battering down the walls of Constantinople, burst in the course of the siege; but two others, which Mr. Gibbon states were nearly as large, did not burst, and were used throughout the siege—who constructed the guns of equal size, mounted upon the batteries of the Dardanelles, which defeated the fleet of Great Britain, which had threatened a terrible bombardment of Constantinople, does not appear. It is not probable that they were made by Turkish founders. French Engineers, obtained for the purpose by Sebastiani, the French Ambassador at the Turkish capital, had the management of them when they created such fear and caused such havoc in the British fleet, as it made fast sail out of the Dardanelles. This, as already said, was in the year 1807. Notwithstanding the efficiency evinced by these heavy guns, the disposition to use guns of very large calibre in sieges, or on board ship, was slow in developing itself in Europe. It is only within the last twenty or twenty-five years, that men of real science have turned their attention to an examination of all

the probable capacities of very heavy ordnance, and exerted their inventive powers to render them effective, in the circumstances in which they are applicable. Paixham, Dahlgreen, Armstrong, all figure conspicuously in this effort. The simple question now is, can any thing further be effected in the construction and use of such very large ordnances? Can something further be done without an expense beyond the value of this invention? To me it seems the case is one in which experiment will be justified by the probabilities of advantage. If these guns were so effective in the infancy of artillery service (A. D., 1453,) and were found so complete a defense A. D., 1807, when the Turkish military spirit and skill had sunk so low, but was momentarily aroused by foreign officers—what might not be done for purposes of defense, if the inventive genius of the present day were thoroughly excited and its powers exerted on the subject and proper scope given to its exercise by governmental experiments? Suppose, for example, that the outermost port of New York, the first that would be encountered by an approaching hostile fleet, were to be, in part, defended by sixteen of such guns as struck the Windsor Castle, with an eight hundred pound block of marble, and by that single blow almost captured her, were arranged in proper positions in the port, is it not probable that no fleet could come near enough to do any considerable damage. An approach of a mile and a half would be too near for their own safety, with such guns to encounter. The guns at the Dardanelles struck frequently the British vessels, making all haste to get away, at the distance of a mile. These large guns could throw a ball four miles, and, probably, under skillful artillerists, with considerable precision. The Armstrong gun is said to strike with such precision at six miles. Its weight is 100 lbs.

Twelve hundred guns in its several forts at New York, would not be disproportionate to the number actually mounted with the auxiliary vessels of war and gun boats at Cronstadt. Fortress Monroe has alone two hundred and eighty-five guns.

The Turkish guns at the Dardanelles were about thirty inches diameter. Guns of 18, 20, and 24 inches appear to me sufficiently large. The weight of ball, or if square pieces of marble or stone were used, would correspond to the specific gravity of the substance. The weight of a square piece is to that of a ball or spherical, as 1 to .5236. Now, then, as the weights of similar solid bodies are to each other in proportion to the cubes of their similar sides or diameters, a gun of twelve inches diameter would throw a ball or square piece of iron, marble, common stone, or other solid body proportioned to that thrown by one of twenty inches calibre, as 1728 (number of cubic inches in a square foot,) to 8000; and to one of twenty-four inches calibre as 1728 to 13,824.

Rifled cannon ought also now to be employed in fortresses. Their lightness is an advantage for fortresses as well as for the field. Twelve, twenty-four, and thirty-two pounders of this class of guns might be advantageously introduced into fortresses. The disadvantage of them will be their becoming foul so much sooner than smooth bores, and being more difficult to clean. Nevertheless, from their long range and precision of fire, I have no doubt that they could be introduced in considerable proportion very advantageously.

All the great fortifications ought to be dealt with by the government in a spirit of equal justice, according to the population and property which they protect. Our system of government is not congenial to the wishes, feelings, or interests of kings. Our sea-ports—through which alone we are vulnerable—should be placed in a state of defense against any sudden combination or confederacy of European royalties. These latter run a course so hostile to our republican institutions, that we cannot rely on their permanent friendship. It is, therefore, the part of prudence and wisdom to guard against any inimical designs which they may entertain.

Dismissing the subject for the present, I earnestly commend it to the attention of all patriotic statesmen, and of that numerous class of our professional military men who are aware that although all proposed innovation is not an improvement, yet that even in military implements and inventions there is a real onward march; and that it is the duty, especially of the military profession, to regard them without prejudice or passion, with an eye single to the security of their country.

W. A.

PROFITS OF MINING ENTERPRISES.

Mining in the United States is generally regarded as so hazardous as to be classed with those enterprises reproachfully termed *speculative*. Yet when conducted on correct business principles and with knowledge, few investments are more certain than this.

"The statement can now well be believed which has lately been made by the London Mining Journal, that 'taking all the investments made in that country (England) in mining enterprises (other than coal and iron) good, bad and indifferent, at home and abroad, the returns from the good mines have paid a larger interest upon the *entire outlay* than is realized in *any other species of investments*.'

"The exact figures are, for mining, an annual interest of 13½ per cent. Other investments 4-8-10 per cent. Amount of dividends paid upon investments in mining, 111 per cent.

"This is doubtless owing to the fact that in England mining is treated as a regular business, and is never undertaken by those

who are not willing to devote the same attention, time, and money to it, that are considered necessary to the success of any other business.

"The following list shows the character of the investments made in some of the English Companies, and also tends to confirm the accuracy of the statement of the *Mining Journal* :—

List of English Mining Companies, showing the amount of investment made and amount of dividends paid, with selling price per share.

No. Shares.	NAMES.	Amount paid per Share.	Present Price per Share.	Amount paid in Dividends per Share.
5,120	Alfred Consols, Copper	10 75	90 00	68 00
500	Botolph Claydon, Tin and Copper	456 00	1,400 00	1,781 00
1,000	Carn Brea, do.	75 00	425 00	1,157 45
900	Cefn, Cornw. Brynno, Welsh Lead	185 00	475 00	15 00
526	Condurow, Copper and Tin	100 00	6-7 50	310 00
1,024	Devon Great Consols, Copper	5 00	2,650 00	2,300 00
179	Doleah, do.	1,989 00	500 00	4,396 00
2,240	Foxdale, Lead	37 50	150 00	940 75
2,000	Gongin, Welsh Lead	30 00	30 00	190 00
76	Jamaica, Welsh Lead	19 00	50 00	100 00
20	Lacey, do.	50 00	50 00	6,500 00
400	Lisbourne, Welsh Lead	50 00	700 00	1,119 00
200	North Pool, Copper and Tin	112 35	1,500 00	1,620 00
526	South Caradon, Copper	12 30	1,500 00	4,440 00
94	Saint Ives, Tin	400 00	500 00	4,440 00
96	Tesavean, Copper	162 00	750 00	2,387 50
256	West Caradon, Copper	102 00	687 50	719 50
400	West Sison, do.	192 50	1,000 00	1,000 00
512	Wheat Basset, do.	52 25	2,400 00	1,850 00
128	Wheat Basset, do.	53 00	2,005 00	3,550 00
192	Wheat Friendship, Lead and Copper	500 00	11,877 50	1,000 00
512	Wheat Mary Ann, Silver Lead	30 00	180 00	160 00
520	Telaway, do.	44 00	137 50	247 00

Or, expressed in a different form, it is seen that the above twenty-three Companies have invested in their enterprises.....	\$1,040,261
That the present value of their property is.....	8,005,480
And that the shareholders have received in dividends.....	13,931,394
The average upon the entire number of shares of the twenty-three Companies, is a cost per share, of.....	65 24
A present price per share, of.....	502 06
And the amount of dividends received per share.....	873 71

"What other branch of commerce or industry can show returns like these? And may it not be possible that the actual facts regarding mining, when practised as a legitimate pursuit, have been hitherto too little known among business men generally in the United States?"

THE MOST SUCCESSFUL GROUPED.

From the foregoing list we group some of the most successful of these mines, arranging the statistics so that they can be seen at a glance. Why dwarf by comparison all ordinary investments by the immensity of their returns.

Jamaica, Lead Mine. No. of shares, 76. Amount paid per share, \$19. Present price per share, \$250. Total amount paid in \$1,444. Present value, \$190,000. Increase value on the original investment, *thirteen times*.

Wheat Basset, Copper. No. of shares, 512. Amount paid per share, \$25 25. Present price per share, \$2,050. Total amount paid

in, \$12,800. Present value, \$1,049,600. Increase in value, *eighteen times*.

South Caradon, Copper. No. of shares, 256. Cost per share, \$12 30. Present price per share, \$1,500. Total amount paid in, \$3,200. Present value, \$384,000. Increase in value, *one hundred and twenty-two times*.

Wheat Buller, Copper. No. of shares, 256. Amount paid per share, \$25. Present price per share, \$3,095. Total cash capital, \$6,500. Present cash value \$792,000. Increase value, *one hundred and twenty-four times*.

Devon Great Consols, Copper. No. of shares, 1024. Amount paid per share, \$5. Present price per share, \$2,050. Total cash capital, \$5,120. Present cash value, \$2,099,200. Increase value per share, *more than four hundred times*.

Taking the above five mines together and the sum of the original cash capital paid in by the stockholders was, in round numbers, *Seventy-nine Thousand Dollars*, and the present combined value of the investments, reckoning them at the present selling price of the shares, is over *Four and a Half Million of Dollars*.

Since the foregoing was written, later statistics than these have come to hand from *Gryll's Annual Mining Sheet* containing statistics of the Copper Mines of Cornwall for the year ending June 30, 1859.

It appears from these that during the past year the last mentioned mine—the "Devon Great Consols," turned out 23,748 gross tons of copper. On the 1st of June last, (less than three months back) the lucky shareholders received as their annual dividend \$220 per share. That is mine stock worth having; it cost only \$5 per share, fifteen years ago, when the mine was first opened.

It is true these are the successful mines. Mines to be placed in this class must be either ordinary mines managed with great skill, or exceedingly rich mines, and when such are found and work prosecuted with industry, no investment is more certain of immense returns to stockholders.

Some of our Lake Superior mines are of this class of naturally rich mines. The Cliff Mine cost the shareholders \$111,000, or \$18 50 per share, and it has paid \$900,000 or \$150 per share in dividends. The Minnesota cost the shareholders \$66,000, or \$3 30 per share in cash. The shares now sell for \$120, which, on the 20,000 shares, gives the present value of the capital \$2,400,000. From 1852 to 1858, this mine paid the stockholders more than a million of dollars in dividends.

The "big tunnel" on the Cov. & Ohio R. R., in Greenbrier Co., Va., is 4,700 feet long, and 700 feet below the surface of the earth. It is 300 feet longer than Blue Ridge tunnel. The width is 27 feet, to accommodate a double track, and the height is 23 feet.

RAILROAD MEETING.

Pursuant to previous notice, a Railroad Mass Convention was held at Osawatimie, July 26th, 1859.

The Convention was called to order by electing Samuel Geer, President, and H. S. Greeno, Secretary.

The object of the meeting was stated by Mr. John O. Wattles, of Linn county, in his usual instructive manner, which was to take further steps towards effecting an organization of the Wyandott and Osawatimie Railroad Company, and to recommend the continuance and extension of that road south, in order to connect with the Great Galveston Bay and Lake Superior Railroad.

The following communications were received and read by the Secretary, from J. Lykins and K. Coates of Kansas City.

KANSAS CITY, July 25, 1859.

To the President and Members of the Railroad Convention to convene at Osawatimie on the 26th inst.

GENTLEMEN:—Some of our citizens start in a few minutes to attend your Convention, and I have only time to express briefly my regret that circumstances are such as to absolutely prevent my accompanying them, and meeting with you all in a Convention so important in its character, and I trust of mutual interest to the citizens of Southern Kansas, and Kansas City.

I trust that your deliberations will be harmonious, and sincerely hope that you will determine upon some action and efficient policy, such as will unite all the interests that are geographically identical, and impart such energy as will certainly terminate in success.

So far as I am concerned, should the policy be such as above indicated, I will be happy to labor hand in hand with you for the consummation of the important work contemplated, and think that I may safely pledge the most earnest and united efforts of our city.

Yours, K. COATES.

KANSAS CITY, July 25, 1859.

To the Convention assembled at Osawatimie:

GENTLEMEN:—I have witnessed with deepest interest, a disposition, on the part of the people, to move in the construction of the Great Gulf Road, connecting the Bay of Galveston by rail, with the Lakes of the North, thereby placing all the country South of the Missouri River within a few hours run of the Sea board, and giving our great West facilities and advantages never to be obtained by eastern connections.

Among the very first to advocate the construction of such a road and to present its claims and importance to the public, I can but tender you my most hearty cooperation, in the execution of any measure calculated to secure an end of such vast importance to the whole West.

Circumstances forbid my being with you, but I can with great pleasure refer your honorable body, to our able and intelligent delegates, Capt. Van Horn, and Joseph C. Ranson, by whom this communication is sent, and who will fully represent our views and wishes, besides, than whom, none better calculated to help on in this great work could have been selected. Wishing you every success in this noble enterprise,

I am, gentlemen,

Your most obedient servant,

J. LYKINS.

The Convention proceeded to elect the

following committee to prepare and report resolutions as the basis of its future action:

Capt R. T. Van Horn, of Kansas City, Mr. John O. Wattless, of Linn county, and L. D. Williams, of Osawatimie.

The Committee reported the following preamble and resolutions which were received and duly adopted by the convention:

Whereas, We believe the time has arrived, for action in regard to our future interests as identified with railroads, and

Whereas, The Constitutional Convention now in session at Wyandotte, has proposed to ask of Congress through the ordinance to the Constitution for a grant of lands, who deem it but right that South-eastern Kansas, the most fertile as well as one of the most populous portions of the Territory, should receive her just quota of lands for such purposes. Therefore,

Resolved, That we deem the construction of a railroad from the Gulf of Mexico to the mouth of the Kansas river, as one of the most important that can be built in the Territory; and learning as we do that the Texas portion of the Road has been chartered from Galveston Bay to the State line in the direction of Fort Scott, under the name of the "Galveston, Houston and Henderson" Railroad, and is now finished and in operation for one hundred miles or more, we feel called upon to make every honorable exertion in our power for the speedy completion of our part of the road through the counties of Johnson, Lykins, Linn, Bourbon and McGee, in the direction of the terminus of the above mentioned road.

Resolved, That an immediate organization of the Wyandotte and Osawatimie Railroad Company, offers the most ready and practical method of meeting our wants, and that we respectfully, though urgently ask of the corporators of that company to proceed with such organization as speedily as possible, and to extend it in the direction of the Texas road as above referred to.

Capt. Van Horn, of Kansas City, addressed the meeting in an able and instructive manner, pointing out the practicability and great advantages that would result from the completion of a Railroad from Kansas City by the way of Osawatimie and Fort Scott to Galveston Bay.

On motion of Dr. S. C. Parrish, of Osawatimie, all the corporators of the Wyandotte and Osawatimie Railroad be requested to meet at Wyandotte, Thursday, the 11th of August, in order to complete the organization of the Company.

On motion, Dr. S. C. Parrish was elected a delegate from Osawatimie to attend the railroad Convention to be held at Gallatin, Daviess county, Mo., on the 14th of September next.—*Osawatimie Herald*.

ALABAMA & TENNESSEE RIVER RAILROAD.

The report of this Company for the year ending May 31, has been received. The receipts have been:

From passengers.....	\$38,084 85
" up freights.....	31,813 00
" down freights.....	74,442 94
" mails, &c.....	11,288 04

And the expenditures were..... \$155,628 83

Leaving as net receipts..... \$78,907 43

The receipts from all sources during the year were \$295,048 37; and the disbursements \$276,536 69—leaving cash on hand to the amount of \$18,511 68.

Compared with the previous year, the gross earnings show—

An increase of.....	\$42,477 31
The expenses an increase of.....	15,345 55

And the net income an increase of..... \$27,191 76

The principal items of disbursements during the year, as shown in the Treasurer's report were:

For equipment.....	\$10,476 29
" Stations, buildings, etc.....	4,549 11
" Superstructure.....	78,716 66
" Graduation, masonry and bridging.....	30,121 62
" Engineering, agencies, etc.....	6,260 12
" Interest, discount, etc.....	63,723 05

" Running and repairing road.....	76,721 40
Miscellaneous.....	5,818 54
Total.....	\$276,536 69

During the year the work of construction has been prosecuted between Alpine and Talladega. The masonry has been completed.—The bridge spanning Talladega creek finished, and the iron laid over it. The graduation has also made some progress. There are about 14,000 yards of earth yet to be removed. This can be done in two months, when the entire track will be ready for track-laying to Talladega. Sufficient rails, chairs and spikes for this purpose has been purchased—the former from the Montour Iron Works, Penn.; and the latter from Messrs. J. R. Anderson & Co., of Richmond, Va. A portion of the rails had been received, and the remainder were in course of delivery. The cross-ties were also in readiness. So that, by the employment of an ordinary working party, the road can be opened for business as far as Talladega by the first of September next. This will give 109.77 miles of road constructed and equipped, at a cost, excluding interest, of about \$1,832,856, or \$16,906 per mile. The condition of the remaining 57.65 miles between Talladega and Gadsden, the terminus fixed by this company's charter, is as follows: From Talladega to Jacksonville, 34.81, about 27 miles are graded, 4.69 miles partly graded, and 3.12 miles not commenced. Thence to Gadsden, 22.84 miles, 5.58 miles are graded, and 4.14 miles partly graded, embracing all the heaviest work, and 13.12 miles not commenced. On the former of these two divisions, about two-fifths of the masonry are built, and on the latter about one-third. If the company had the iron to clothe the road, the whole could be finished to Gadsden in eighteen months. The estimated cost of the road from Talladega to Gadsden, is as follows, viz:

From Talladega to Oxford, 20.16 miles.....	\$178,672
Oxford to Jacksonville, 14.65 miles.....	149,240
Jacksonville to Gadsden, 22.84 miles.....	277,529
	\$605,441

The subscriptions to the capital stock of the company is as follows:

By individuals.....	\$952,140 00
Paid for labor, materials, etc.....	45,000 00
Taken by the State, in the 2 and 3 per cent. funds.....	250,641 04

Making the capital stock of the Co.....	\$1,292,781 04
Of which there has been collected.....	1,054,915 27

Leaving a balance uncollected of..... \$207,865 77

Under the Act of Congress, of June 3, 1856, this company was made the recipient of a grant of land, of a similar character of the grants made to other roads. There have already been certified to the company 413,770 acres. A further quantity will be obtained, but the amount is at present uncertain, as a division of a portion of the territory through which the road runs, has to be made with the North-east and South west Alabama Railroad. These lands are valuable, and will add largely to the means of the company.

In reference to the connections of this road, the report says:

At Gadsden, the northern terminus of your road, the Tennessee & Coosa Railroad sets in, which connects North and South Alabama, at Gunter's Landing, at the south bend of the Tennessee river, a distance of 36½ miles from Gadsden. This company, as we are advised, have 23 miles of their road graded, and have let the remainder to contract. Thus it will be seen that the distance from Talladega to Gunter's Landing is 94 miles, and out of this distance the two companies have 55½ miles grad-

ed, 8.83 miles partly graded, and 29½ miles not graded. If the road is completed to Gunter's Landing, the connection with the Nashville and Chattanooga Railroad, near Winchester, and with the Memphis and Charleston R. R., will be made in a short time. At or near Gadsden, your northern terminus, the Willis Valley Railroad will connect with yours, which will give you a connection with East Tennessee at Chattanooga. This road is under contract 60 miles, and the work has been commenced some time since. At Jacksonville, the Coosa and Chattanooga Railroad, and the Dalton and Gadsden Railroad expect to connect with your road.

The Southern connections with your road are engrossing quite a large share of public attention. The Selma and Gulf Railroad was organized some time last year; a thorough survey has been made and the road located on a very favorable route, near a place called Midway, about 50 miles below Selma. The Mobile and Great Northern Railroad has been organized, and has elected a Board of Directors, under whose direction we confidently look for an early connection with the Selma & Gulf Railroad, at or near Midway, which will give Mobile the controlling influence of the traffic and travel South.

GENERAL STATEMENT.

Individual stock.....	\$725,382 38
71 bonds of city of Selma, sold.....	69,891 85
State of Alabama fund stock.....	259,641 04
5,6,000 first mort. bonds sold.....	487,522 27
Second mort. bonds, 1st series.....	180,050 00
" " 2d ".....	45,634 49
Interest.....	26,691 86
Net proceeds from transportation.....	239,921 50
Sales of engines, cars, etc.....	12,694 52
Rents of warehouses.....	13,016 92
Borrowed money and bills payable.....	212,406 16
Miscellaneous.....	501 95
	\$2,264,468 94
Rolling stock.....	144,549 45
Station buildings, etc.....	60,430 13
Superstructure.....	769,288 06
Graduation, masonry and bridging.....	761,883 40
Engineering, agencies, salaries, etc.....	108,946 53
Interest, discount and commissions.....	326,961 59
Real estate, etc.....	16,119 85
Right of way.....	7,501 07
Rebuilding Coosa bridge.....	18,829 36
Miscellaneous.....	31,447 82
Cash and Bills receivable.....	18,511 68

\$2,264,468 94

The officers are:

THOS. A. WALKER, *President*.
WM. ROTHROCK, *Chief Engineer*.
D. SULLIVAN, *Superintendent*.
A. M. GOODWIN, *Treasurer*.

CALICO PRINTING.—In almost all the modes of calico printing, the processes are very numerous, to insure the beauty and the permanence of the colors. In what is called the steam-color printing, the agency of steam is applied to aid in fixing the colors to the cloth. The cloth is first steeped in a mordant liquor; then printed by the cylinder with various colors, which, for their peculiar properties, are called steam colors. The cloth is hung up to dry, and when dry it is exposed to the action of dry steam. This is done by five different kinds of apparatus; the column, the lantern, the cask, the steam-chest, and the chamber.—The first of these, which is most frequently used, is a hollow copper cylinder about forty-five inches long by two to six in diameter, perforated along its whole surface with small holes one quarter of an inch apart. To the lower end of the column a circular plate is soldered, which serves to prevent the cloth coiled round the cylinder from falling down from it. The bottom of the hollow cylinder is terminated by a tube one inch wide, which fits tight into the socket of an iron chest beneath

it, into which side the steam pipe of supply enters. The goods printed with the steam colors and properly dried are lapped tight around this hollow cylinder, and covered exteriorly with an envelope of strong cotton cloth, blanket-stuff, or flannel. The steam is then let on, and continued for twenty or thirty minutes, according to the nature of the dyes. The steam being stopped, the printed goods are rapidly unrolled from the columns while still hot, lest any condensation of vapor should take place to stain them.

In the printing of yellows, greens, purples, pinks and browns, different coloring substances are used, and different processes adopted for causing the colors to combine permanently with the cloth; but they all possess a common character, inasmuch as mordants are applied to the white cloth, and the colors of the design are afterwards brought up in the dye-bath. A pretty and ingenious method of producing the "rainbow" pattern is as follows:—A number of sieves, containing the different shades of color, are placed nearly under each other, over each sieve a disc revolves, having projections of copper wire, which dip into the colors. These various discs are supported upon pedestals which admit of being very easily adjusted, and are also regulated in such a manner, that, as they revolve, the projecting wires give color to the cylinder in successively lighter shades. —*Bos. Com. Bulletin.*

BREMEN—ITS COMMERCE.

The city of Bremen is not accessible to vessels drawing over seven feet water. Some twelve miles below the city, at the port of Vegesack, vessels drawing thirteen to fourteen feet water can ascend; but all vessels of larger draught must stop at Bremerhaven, some thirty miles from the city, their cargoes being discharged and received by means of lighters, at an expense of fifty cents per ton of 2,000 lbs., on board ship. Bremerhaven, it is true, is under the exclusive jurisdiction of Bremen, the limited territory which it occupies having been ceded to the republic by Hanover, in 1827, and the outer harbor, the sluiced dock, and inner harbor, with which it is now provided, having been immediately commenced and completed in 1830. Under the most favorable circumstances, however, general commerce must experience much inconvenience from the delays and incidental expenses attending a river transshipment of over thirty miles between the port of entry and the port of discharge; and the extent of this inconvenience to American commerce, may be measured by the large per centage, (between one-half and three-fourths of the whole,) on the entire sea commerce of Bremen, assigned to the United States.

An official statement exhibits the navigation of Bremen with all foreign nations, and also with the United States, for a period of seven years, ending with 1855, which may be taken as a fair average of the share borne by the United States, in the general trade of that important commercial emporium. It is as follows:

Years.	Navigation between Bremen.			
	All foreign countries.		United States.	
	Entered.	Cleared.	Entered.	Cleared.
1849.....	225	205	103	205
1850.....	301	295	126	175
1851.....	345	416	131	235
1852.....	443	508	179	327
1853.....	386	432	132	281
1854.....	450	493	200	362
1855.....	398	431	139	162

Another table, also compiled from the official publications of the State Department, shows (although the figures must be much

below the average annual amount,) the ports of the United States, with which the direct intercourse with Bremen is chiefly conducted. The ports of departure, and amount received from each, in the direct trade between the United States and Bremen, in 1852, were as follows:

New York.....	\$1,202,962
Baltimore.....	20,225
Richmond.....	1,618,645
Philadelphia.....	324,300
Wilmington.....	11,330
Charleston.....	262,730
Savannah.....	79,830
New Orleans.....	2,452,032
Galveston.....	71,775
Total.....	\$6,043,829

By a treaty, concluded in 1856, between Bremen and the States of the Zollverein, and a convention subsequently entered into between Prussia, Hanover, Hesse-Cassel, and Bremen, and assented to by Oldenburg and Lippe, all river tolls are now suspended; never, it is understood, to be revived, upon the Weser, along the course of its tributaries, commencing at the city of Bremen, and as far up as the river is navigable. Formerly there existed a sort of river toll at Elsfleth, eighteen miles below Bremen, similar to that which now harrasses the commerce of Hamburg, at Stade, or Brunshausen; but it has long since been extinguished. The artificial obstructions, therefore, no longer exist.

ABSTRACT OF THE QUARTERLY BANK STATEMENT.

We are indebted to Mr. Baldwin, of Auditor of States office, for the following abstract of the Quarterly Bank Statement, exhibiting the condition of the several incorporated banking institutions of the State of Ohio, on the first Monday of August, as shown by their returns made, under oath, to the Auditor of State:

RESOURCES.

INDEPENDENT BANKS.

Specie.....	\$122,241 23
Eastern Deposits.....	117,314 57
Notes of other Banks.....	186,483 ..
Due from other Banks and Bankers.....	121,358 09
Notes and Bills Discounted.....	1,447,462 67
Bonds of State of Ohio and other States.....	659,996 16
Real Estate and Personal property.....	51,945 60
Checks and other Cash Items.....	11,710 17
Other Resources.....	228,536 04
Total Resources.....	\$2,947,047 53

FREE BANKS.*

Specie.....	\$134,607 09
Eastern Deposits.....	408,245 63
Notes of other Banks.....	426,655 ..
Due from other Banks and Bankers.....	257,543 39
Notes and Bills discounted.....	1,135,773 58
Bonds of State of Ohio and other States.....	757,575 51
Real Estate and Personal property.....	27,333 68
Checks and other Cash items.....	36,021 23
Other Resources.....	38,538 93
Total Resources.....	\$3,222,294 04

BRANCHES OF STATE BANK.

Specie.....	\$1,573,787 19
Eastern Deposits.....	338,873 68
Notes on other Banks.....	491,509 ..
Due from other Banks and Bankers.....	894,590 72
Notes and Bills discounted.....	2,042,434 05
Bonds of State of Ohio and other States.....	851,736 85
Real Estate and Personal property.....	623,615 98
Checks and other Cash items.....	77,625 87
Other Resources.....	878,617 02
Total Resources.....	\$14,383,790 36

LIABILITIES.

INDEPENDENT BANKS.

Capital Stock.....	\$612,500 ..
Safety Fund Stocks.....	586,126 15
Circulation.....	563,188 ..
Due to Banks and Bankers.....	103,710 71
Due to Individual Depositors.....	921,907 11
Dividends unpaid.....	128 00
Contingent Fund and Undivided Profits.....	90,439 16
Discount, Interest, etc., etc.....	60,291 99

Bills Payable and Time Drafts.....	6,438 89
State Tax.....	2,243 52
Other Liabilities.....	.....
Total Liabilities.....	\$2,947,047 53

FREE BANKS.

Capital Stock.....	\$662,270 ..
Safety Fund Stock.....	371,775 ..
Circulation.....	649,482 ..
Due to Banks and Bankers.....	496,086 67
Due to Individual Depositors.....	933,767 54
Dividends Unpaid.....	774 ..
Contingent Fund and Undivided Profits.....	34,017 35
Discount, Interest, etc., etc.....	43,507 34
Bills Payable and Time Drafts.....	10,000 ..
State Tax.....	.....
Other Liabilities.....	1,614 14

Total Liabilities.....\$3,222,294 04

BRANCHES OF STATE BANK.

Capital Stock.....	\$4,104,500 00
Safety Fund Stock.....	594,854 32
Circulation.....	6,532,359 ..
Due to Banks and Bankers.....	171,079 98
Due to Individual Depositors.....	2,467,267 37
Dividends Unpaid.....	3,568 ..
Contingent Fund and Undivided Profits.....	231,385 20
Discount, Interest, etc., etc.....	149,712 90
Bills Payable and Time Drafts.....	27,087 09
State Tax.....	26,703 36
Other Liabilities.....	75,273 14

Total Liabilities.....\$14,393,783 36

—*Ohio State Journal.*

COMMERCE OF MONTREAL.—The Montreal *Herald* publishes a statement showing the quantity and value of goods imported at that port during the last six months, in comparison with the same time last year, as follows:

	1858.	1859.	Increase.
Dutiable goods.....	\$3,770,282	\$6,736,734	\$2,966,452
Free goods.....	1,204,675	1,813,962	709,287
Total.....	\$4,974,957	8,550,696	3,575,739

A RAILROAD TO THE PACIFIC.—Among the great, and we hope soon-to-be-commenced, projects of importance that are now before the citizens of the United States, is a railroad to the Pacific. That such a road is indispensable is the almost universal sentiment of the country. The people have made up their minds upon the subject, and they are prepared to second and respond to any plan that may be determined upon by Congress. Some of the ablest men in the nation have manifested the liveliest interest in this grand enterprise, and we therefore look forward with the utmost confidence to the early commencement of such an undertaking. That such a road may be built easily, there can be no doubt. Indeed, the more the question is examined the more feasible the scheme appears to be, and the difficulties that now present themselves to timid minds will, we venture to predict, disappear immediately after the beginning of the noble enterprise. Our overland commerce, vast extent of territory, and the necessity of speedy modes of communication between the Atlantic and Central States, and California and Oregon, all point to the desirableness of a Pacific railroad. We hope, then, that the advocates of the various lines in our federal councils will, for once, forget their sectional and local predilections, and agree upon one grand national line. The whole country demands that an overland steam route should be opened. It should not be forgotten that a Pacific railroad will not be long without a favorable influence upon the traffic between the United States, the Sandwich Islands, India, China and Japan.

* The Report of Franklin Bank, of Portage County, is not included in the list of Free Banks. It came too late for insertion.

THE CENTRAL TRANSIT.

MAGNIFICENT ENTERPRISE FOR TEXAS AND MEXICO.

(From DeBow's Review.)

Take a map of Mercator's projection, stretch a line from New York tangent to the Gulf of Mexico, and prolong it at each end; it will cut the Pacific ocean near Mazatlan, and will strike Newfoundland at Cape Ray, opposite to Cape North, in Nova Scotia. It will pass nearly over Boston, New Haven, New York, Philadelphia, Baltimore, Washington, Abingdon, Chattanooga, Jackson, Alexandria, Houston, Lavaca, San Patricio, Revilla, Parras, Durango, and Mazatlan. Slight deflections will take it by Portland, Me.; Lynchburgh, Va.; Baton Rouge, La.; Corpus Christi, Texas; Monterey, Saltillo, and Sombretete, Mexico. *This is the shortest practicable route for a railroad from Portland to the Pacific, and, a fortiori, the shortest from any intermediate point, such as New York.* It is believed to be the only route by which private capital can build a railroad from New York to the Pacific ocean. Political considerations may force a road, at governmental expense, by a more northern route. But this alone, it is believed, of all the proposed routes connecting our railroad system in the East with the Pacific, will pay interest on cost. Were an engineer now required to build a railroad on the cheapest and best route from New York to San Francisco, without reference to such roads as have already been built, he would undoubtedly take the route toward Mazatlan, and thence along the plains and valleys near the Pacific coast. The distance from New York to San Francisco, direct, is about twenty-eight hundred miles; by Mazatlan, thirty-eight hundred miles; difference one thousand miles, which would be greatly reduced by the excess of curvature on the northern route. If, now, the extent of road already built on each route be deducted from the whole distance of each, it will be found that the difference between what remains to be built on each is not important; but that the route through Monterey and Mazatlan is easily accessible to the ocean, smooth in profile, pleasant in climate, and abounds in materials, food, and labor; while the other (say from St. Joseph, Mo.) lies through a country far from the ocean, rough in profile, rigorous in climate, and destitute, almost, of food, fuel, and labor. As to the prime cost of building, and the expense of working the two roads, the contrast is as great as that of their climates. If, then, all the commerce of the Pacific were concentrated at San Francisco, and New York desired to get to it by the cheapest and speediest railroad—cheapest in original cost and daily use, speediest in construction and in running time—she would choose the route by Mazatlan.

But all the commerce of the Pacific is not confined to San Francisco, nor that of the Atlantic to New York. Much the larger share of the merchandise of the world would find itself nearer its destination at Mazatlan than at San Francisco. This is palpably true of all coming from the Pacific toward the Atlantic, and all destined for Central and South America and Australia. Anything destined for Asia would be there equally well placed as at San Francisco. The time to the Sandwich Islands is about the same, and vessels going from either make that a stopping point. The harbor of Mazatlan is now good, and may be easily rendered safe in all winds. Its climate is healthful and dry, and innocuous to persons or goods. *It is on the direct route from Eng-*

land to Australia. If the line from Mazatlan to New York be extended on the globe, one end, passing close to the Society Islands, will strike Australia to the south and east of, but near to Sidney, and the other will cut the British Isles. This is not only the shortest line from England to Australia, but the route is by far the most expeditious. If it be assumed that ocean steam-ships will average twelve, and railroad cars twenty-four statute miles per hour, the difference in distance from Southampton to Sidney will be about four hundred and seventy miles in favor of the route by Mazatlan over that by Panama, while the difference in time will be four to five days, supposing the railroad to be used from Portland to Mazatlan. From Southampton to the Sandwich Islands, where all vessels from the west coast of America call on their way to Japan and China, the difference is still more striking, being, in distance, thirteen hundred and thirty miles, and in time nearly nine days in favor of Mazatlan over Panama.

Taking New York as a starting point, the comparison is still more favorable to Mazatlan. From New York to Honolulu the difference of time would be eleven to twelve days in favor of the route by Mazatlan over that by Panama. From New York to Mazatlan, via Panama, the time is about twenty days, which can not be diminished by new roads; via New Orleans and Tehuantepec (when a railroad across the Isthmus shall have been finished,) the time will be ten days; via New Orleans and Monterey, five days. To each of these, add four days for time to San Francisco by sea, and there results twenty-four, fourteen, and nine days, respectively, from New York, and twenty-four, eleven, and six days, respectively, from New Orleans to San Francisco.—The first two can not be reduced by new roads; the last may be, two days. It will, then, at no distant date, require but two days from New Orleans to Mazatlan, five days from New York, six days from Portland, and sixteen days from Southampton. To each of these, two days only must be added, to reach San Francisco when the railroad from Mazatlan shall have been built.

The necessities of the commercial world demand that the best route across this continent shall be made available. The opening trade of the Amoor, China, Japan, and the increasing trade of Australia, and of our own western coast, require this to be done promptly. The recent excitement about gold on Frazer's river has caused some talk of a railroad from Halifax to Vancouver's Island, entirely on British soil. Conceding the practicability of this road, it would be near thirty-five hundred miles long, most of it very costly to build, expensive to maintain, and impossible to work during a large part of the year. On three-fifths of the route there is no accessory navigation. The road must be constructed continuously, and haul its own materials. How long it would take to build such a road, no past experience gives reliable data to determine, yet political considerations may induce the British government to foster such a work; but it will not run from Halifax. Portland is its natural commencement; thence much is already done, and the line would be much the shorter. It is a work of peace and progress, and we may well join our British brethren in hearty wishes for its success.—Portland, on our own soil, being the point at which Europe must seek access to both these lines, will become a great commercial center. From Portland to mouth of Frazer's river, by air line, is twenty-five hundred and ninety statute miles; to Mazatlan twenty-two hundred

and forty; difference three hundred and fifty miles in favor of Mazatlan. Of the former route about five hundred miles of the road are already built, leaving some two thousand miles, increased by curvature; to be yet made. On the latter, from Portland to Chattanooga, Tenn., ten hundred and fifty miles of the direct line is nearly finished; the part thence to Jackson, Mississippi, is under construction; and from Jackson to New Orleans the road is in operation. From Chattanooga, the road is complete to Memphis, on the Mississippi river, whence boats run daily to New Orleans. From this road another leads to New Orleans, via Jackson, Mississippi, of which a gap of only eighty miles remains to be filled, and this gap is being reduced as fast as track can be laid. Many routes conduct from our Atlantic ports to New Orleans, some complete, some under way, while others in progress are stretching toward the west end of the Gulf of Mexico, and thence toward Mazatlan by the more direct line. The line from Portland, via New York, to New Orleans, may be treated as complete, though yet to be greatly shortened by roads now hastening to completion. These done, and the eleven hundred and forty miles from New Orleans to Mazatlan completed, the distance from Portland to Mazatlan, by railroad, will be about twenty-six hundred and ten miles via New Orleans. Of this eleven hundred and forty miles west of the Mississippi, eighty miles, to Berwick's Bay, are finished; about as much more is graded; the iron purchased for one hundred and sixty-three miles, and means secured for still another one hundred miles. Not over eight hundred miles remain to be provided for, most of which is of very easy construction, and none presents serious difficulties. The line sweeps around the Gulf of Mexico, through a level country, crossing the streams at their confluence with the tide, where there is little change in height of the waters, and where materials are accessible by water on either hand. A part of this general line is now under construction from Houston, in Texas, westward, at a cost less than ten thousand dollars per mile, with a rail of fifty-six pounds per yard. Roads from all directions in the valley of the Mississippi are tending toward Houston, whence the main trunk will stretch along the heads of the bays to Corpus Christi. From Corpus Christi to the Rio Grande, the line is covered by the charter of the Aransas Road Company, granted by the State of Texas; and from the Rio Grande to the Pacific by that of a company organized under a decree of the supreme government of Mexico.

The advantages of this route may be partially made available without awaiting the constructing of any more railroad. By the use of the eighty miles now in operation to Berwick's Bay, mails and passengers may be taken from New Orleans to Corpus Christi, by steamships, directly across the Gulf, in forty-two hours, or in forty-eight hours, touching at Galveston.—The ships would enter Texas by the Aransas Pass, and transfer their loads to small steamers for Corpus Christi; thence a line of coaches may be used to Mazatlan, and thence steamships or sailing vessels to any port in the Pacific. The time by steam from Mazatlan to San Francisco is about four days, and by stage from Corpus Christi, six hundred and fifty miles; it would ordinarily be about six six days for passengers, though the mail might be carried over in four days. This would give, for the ordinary passage from New Orleans to San Francisco, twelve days, and for express mails or passengers not over ten days. There are so many cities and villages

on this route, provisions are so abundant, and the roads so good, that a line of stage-coaches might be cheaply established and maintained. This done, a telegraph line would soon follow. It might be stretched from New Orleans around the heads of the bays, or from Memphis, by Little Rock and Fulton, in Arkansas, to Houston, in Texas, and thence to Corpus Christi, by routes presenting many facilities. This line could be conveniently branched so as to reach the chief points in Texas, including all the towns along the lower Rio Grande. It would naturally pass through the flourishing city of Monterey, and branches could be conveniently sent off on each hand to the capitals of the several States of Mexico. Arrived near the Pacific, the populous and wealthy region along the Rio Grande de Santiago would be traversed to reach the city of Mexico itself. From Mazatlan a wire could be easily run up along the wooded slopes toward California and Vancouver's Island. Thus, all Mexico, and our whole Pacific slope, would be in telegraphic connection with all the country east of the Rocky Mountains. There would seem to be little doubt that by this route all these connections may be best made.

To return to the railroad: That part leading from Aransas Bay to Mazatlan demands more particular description. It is the *transit* from ocean to ocean. The bar at Aransas Pass is of variable depth, being sometimes seven feet and sometimes fourteen feet. No doubt is entertained that the greater depth may be maintained by artificial means, at moderate expense; and it is confidently believed that a depth of twenty-four feet may be had at an expense which commerce may well justify.— Within the outer bar there is deep water, with a secure harbor, and the anchorage outside is good. From the deep water within the bay, vessels drawing six feet run to Corpus Christi. It is hoped that this depth may be increased, so that all vessels crossing the outer bar with its present depth may go up to Corpus Christi. A railroad will be extended from the deep water in Aransas Bay to Corpus Christi, and thence to the Rio Grande. No serious obstruction occurs on this entire distance of one hundred and fifty-five miles. Save a few miles of slight embankment in shallow water near Aransas and Corpus Christi, the line lies in a smooth prairie, interspersed with occasional clumps of mesquite timber suitable for crossings. The bridging of the Rio Grande is a simple affair, requiring a bridge not exceeding four hundred yards long and twenty feet high, with rock foundation. Thence the route gradually ascends over ground gently rolling to the beautiful city of Monterey, which has grown, from ten thousand inhabitants; in 1846, to thirty thousand in 1858. Situated at the base of the Sierra Madre, yet elevated full a thousand feet above the sea, with abundant supply of water from the adjacent mountains irrigating its gardens and surrounding fields, it is a delightful place for residence, and is not less favored as to commerce. From Vera Cruz northward, the Sierra Madre presents no practicable pass for a railroad until we find the Minconada just back of Monterey. Here the roads from San Luis Potosi, Zacatecas, Durango, and Chihuahua, all converge, and through this gorge pass into Monterey, where the traders of the interior meet to purchase the goods of American and British importers. Passing this gorge, on a grade from eighty to one hundred feet per mile, the route reaches Saltillo, a town of two thousand inhabitants, whence the grade may be made as gentle as desired to the level of the bench or table-land, forming the main body of the mountains in

this region, which may be some six thousand feet above the sea. This plain is hard, dry, and barren, except when irrigated. Occasionally, isolated mountains obtrude through its flat and smooth surface; but these may be avoided by slight deflections. The road will continue on this plain to Sombrerete, a town of six thousand inhabitants. In this vicinity are many valuable silver mines, formerly worked with great profit. These isolated mountains furnish abundance of hard pine.— The difficulty most to be apprehended is want of water. This may be had generally in wells at forty to sixty feet, and always at some practicable depth. From the vicinity of Sombrerete, the descent from the table-land westward may be made along a smooth and wide valley to the flat country extending to the coast, which would be most nearly reached at some point south of Mazatlan. But whether a proper harbor can be had in that direction has not yet been ascertained. At all events, Mazatlan will answer the purpose of a terminus for the transit. Vessels of any size may enter its harbor, which is generally safe. It is a port of much natural trade. Within a few years, amid the anarchy and general decline of the country, it has grown from a hamlet up to twelve thousand inhabitants. The route must pass some forty to sixty miles to the south of Durango, in order to avoid the high mountains between that city and the coast. This detour to the south will facilitate a branch road, some day, through Guadalupe to Mexico, along the rich and populous region of the Rio Grande de Santiago. Once descended from the middle bench, or table-land, branch roads may be run in any direction. Materials are abundant, and the country is not rough. The profile of the whole transit will be remarkably smooth; rising gradually from tide, at Corpus Christi, with one slight exception, to the height of the table-lands, passing at almost a dead level over them, and then gradually descending to the sea. Although the highest elevation may be as great, or even greater, than that on the route through New Mexico, yet the aggregate of heights to be overcome is far less than at any other known point north of the route from Vera Cruz to Acapulco, passing south of the city of Mexico.

(TO BE CONTINUED.)

LA CROSSE AND MILWAUKEE R. R. COMPANY.

Since my return from New York, my attention has been called to a letter of John P. McGregor, Esq., late director and attorney of the La Crosse and Milwaukee Railroad Company, published about the 15th of June, in which he endeavors to "justify his ways to men;" and concludes with a promise as follows:

"Any stockholder or creditor, who may wish more definite information as to *particular matters*, has only to apply to me, and it will be given to the full extent of my knowledge."

Now, as I am both stockholder and creditor to a *small amount* of said company, I employ this opportunity of inquiring of Mr. McGregor, as to some "*particular matters*."

In the first place, however, let me say that Mr. McGregor, who evidently thinks himself exculpated by his letter, continued a director, during all the time the late Board were concocting the fraudulent schemes of annihilating the stock of the company, by the 3d mortgage

sale; continued until after the sale was consummated; did not publicly dissent from the action of the old Board, by which this great fraud was, as it was hoped and expected, fully consummated; did not object to the transfer of the books of the company to the *pretended* new organization, by which it is hoped the stockholders of the company are forever prevented from investigating the conduct of the old board; participated, as he confesses, in the shameful attempt to organize a board, on a minority of the votes cast at the election, until thereby the whole control of the affairs and records of the company were, as it was hoped, and is now contended, successfully placed beyond the reach of the stockholders. And now, when all these things are accomplished, and a convention is about assembling to nominate candidates for office, Mr. John P. McGregor comes forward, and publishes a letter to the stockholders, who have been, as he claims, swindled, betrayed and sold out, by a board of directors with whom he has acted, and, I believe, fully sympathized, and tells them, in substance, that the affairs of the company have been so *badly* and so *fraudulently* conducted, that it is not worth the while of the stockholders to investigate the matter at all.

This tender regard for the interests of the stockholders, on the part of one who has participated in the action of this Board of Directors, in advising them that their servants and agents have so successfully squandered the Trust Fund that there is not enough left to pay the trouble of investigation, is, to say the least of it, *cool!* and is only paralleled by some other tricks of the old officers of this company. Had Mr. McGregor protested against the frauds of the Board of which he was a member, had he aided in securing to the stockholders even the records of the company, and thus put it in the power of the stockholders to verify his assertions, they would undoubtedly have given Mr. McGregor credit for candor and honesty, and received him back into their ranks, as a rare example of *touching* pitch, without being defiled. But unfortunately for Mr. McGregor's fair fame, (I will not say for his political chances, for his conduct may advance him here,) this has not been his course.

I believe something may yet be saved for the stockholders of this company by a prudent future management, but until the wrongs, which Mr. McGregor has at last acquiesced in, are redressed, and the company put in possession of its books and papers, nothing can be done.

If it be true, that the rascality of the former officers has reached such heights as Mr. McGregor insinuates, I appeal to the stockholders all the more, and submit to them that something is due to the cause of public justice, and if the stock can not be rescued, the villains who have swindled us can be punished.

But to the letter of Mr. McGregor. In speaking of one or more mortgages, the foreclosure of which could not be long delayed, I would ask Mr. McGregor what mortgages he refers to? Because it is well known that Chamberlain, by his lease, was bound to pay the interest on all the mortgages in the Eastern division, except the fraudulent 3d mortgage. Mr. McGregor states that they undertook to fund the land grant coupons with 3d mortgage bonds, and by Mr. Stanton's last report they funded in all about seven thousand dollars of those coupons with 3d mortgage bonds. Mr. McGregor says some of the board became alarmed at the use made of these bonds, and the committee was directed to use them

only for the overdue interest on the land grant bonds. The Board, meanwhile, had authorized the employment of counsel, with a view of commencing suits for the recovery of misapplied funds and securities of the Company, and some weeks were spent by the Attorney and the counsel of the company, in looking up such claims. I would now ask Mr. McGregor the reason those suits were not commenced against those directors that have misapplied the Company's funds? Was it because Stephen H. Alden opposed it? Or was it because they were fearful their own tracks would be uncovered, and they be prevented from consummating this last great fraud, the foreclosure of the 3d mortgage? Mr. McGregor says indeed, in the letter before me, "It was not thought advisable to commence suits that must from their nature, be very sharply contested, while the Company was in such a precarious and destitute condition." One of "the particular matters" I wish further information upon, is how Mr. McGregor expected the Company to recover from the effects of the speculations and corruption of the Directors, while no steps whatever were taken to recover the sums they had squandered? This very like a sick man's refusing physic till he is well again, and better able to stand its effects. If the Company had not the proper funds, why was not an appeal made to the stockholders to contribute to the expense of ferreting out these scandalous frauds?

Mr. McGregor says a resolution was introduced by him, and passed, requiring the statement of the affairs of the company to be published; but he says this "was passed at a time when the board had given up the idea of being able to save the Company." Now, one would suppose that when Mr. McGregor found matters in this fix, he would have appealed to the stockholders at once. But no! not a word from him until after the evil had been accomplished, to guard against which, could be the only object of such a publication, and now comes Mr. McGregor, after the horse is stolen, and says, it is clean gone, and it is altogether too expensive to try to recover it.

In the fore part of February, 1859, and soon after the decision of Judge Miller in my suit against Chamberlain, the Board of Directors met at the Newhall House to transact business, and I was present, and presented them a written request that they should institute suits against a former Board of Directors for misapplying the securities of said Co., which they refused to do. The next morning I had a conversation with J. P. McGregor at the Newhall House, in regard to the 3d mortgage swindle, as he then termed it, and he then said he would go in with me to rip it up. About six weeks later I met him at the same place, and asked him to give some items in regard to said mortgage that would enable me to get up a bill to set it aside. He then stated he knew nothing of his own knowledge against it, and endeavored to discourage me from taking any steps in the premises against it. It was soon after intimated to me that there had been \$20,000, of the Third Mortgage Bonds, placed in the hands of E. P. Whaling, for John P. McGregor's benefit, when he saw fit to ask for them, which, probably, accounts for the change in his views, in regard to the 3d Mortgage.

Wm. E. Smith, also a Director, associated with Mr. McGregor, endorses the letter published by Mr. McGregor, of 15th June last; and it has been also intimated that he had placed in the hands of a brother of his, for his use and benefit, \$20,000 of the said 3d Mortgage Bonds.

I would now ask these gentlemen if this be true? and what services they have rendered the La Crosse & Milwaukee R. R. Co., that would entitle them to \$20,000 each, of the 3d mortgage bonds of this company? I think the Farm mortgage stockholders would also like to know. If you did not receive the \$20,000 each, please state the amount you did receive, and for what purpose.

Mr. McGregor states the action of the Committee in pledging \$400,000 of these bonds as collateral security, was disapproved and repudiated by the Board.

I would here state that this claim, spoken of by Mr. McGregor, had no existence, in fact, against the company. In the month of January, 1858, the Board contracted to give Selah Chamberlain, for finishing 44 miles of their road, \$1,500,000 of Land Grant Bonds, and \$1,500,000 privileged stock, and the Board and Mr. Chamberlain had a private arrangement that these bonds and stock should be deposited with the cashier of the Albany Exchange Bank, as security for the performance of the contract of January 1st, 1858, on the part of Chamberlain, and to be disposed of, and negotiated by a committee, composed of Alfred Noxon, who was then a Director of the Board, Stephen H. Alden, who was the chief manager of the whole thing, and John H. Reynolds, at a price not less than thirty cents on the par value of said bonds, which amount was to be deposited in said Bank, to the credit of Selah Chamberlain, to apply on his contract, as the work progressed.

Some time during the spring of 1858, proceedings were instituted in the courts to recover those bonds from the hands of said cashier of the Bank. He, the cashier, then stated, under oath, that the whole \$1,500,000 of said bonds and stock had been sold by the committee, and \$450,000 had been passed to the credit of Selah Chamberlain, which was the amount Mr. Chamberlain was to receive, by his private arrangement with the Board, for finishing his 44 miles of road under his contract, and all this was known, or should have been, by Mr. McGregor, as a member of the Board, during the summer of 1858. But after the 1st of August of that year, and after default had been made on the payment of the interest on said Land Grant Bonds due at that time, the market price on said bonds dropped to about 20 cents on the dollar, then this committee discovered that they had on hand \$200,000 of the original \$1,500,000 that had not yet been sold, notwithstanding the said Cashier, (some three months previous,) had sworn positively that they had all been sold, and the \$450,000 had been passed to the credit of Selah Chamberlain on the books of said Bank. This committee discovered that there was a difference of \$20,000 between the price they were to pay Chamberlain for the bonds, and the price for which they could then be sold; and this Committee, part of which were members of the Executive Committee of said Board of Directors of the La Crosse and Milwaukee R. R. Co., gave Chamberlain the Company's note for this \$20,000, which they pretended they had lost in the sale of these bonds, and authorized President Stanton to hand over to Mr. Chamberlain \$400,000 of 3d mortgage bonds, as collateral security for the payment of said note, which he did, and the said bonds were sacrificed to pay the said note. A large number of the \$1,500,000 bonds were sold by said committee for prices ranging from thirty to forty-five cents on the dollar.

I ask what became of this great margin? Now, one word more, a word at parting, Did

you endeavor, with the new Board, to which you pretend you were elected, to grant absolution for all the frauds of the old Directors, and vote away, without any real or even pretended consideration, the lands which the District Court had decided belonged to the Company?

Again Mr. McGregor says:

Now, as to the effect of this foreclosure on the rights and interests of the stockholders: Mr. Chamberlain had a judgment for \$629,000; Mr. Cleveland a subsequent one for \$114,000, and after this came judgments of \$75,000, \$25,000 and so on. Now a sale of the road under any of these judgments would cut off the stockholders, and subsequent creditors, just as effectually as a sale under the mortgage.— Nothing but Mr. Chamberlain's lease prevented, and in point of fact Mr. Cleveland obtained a decree in chancery setting aside the Chamberlain judgment and lease, as to him, and had not that decree been appealed from the Supreme Court of the U. S., he would, doubtless, before this time, have sold the road to satisfy his judgment, (he has advertised it for sale for a year past,) and would have thus cut off not only the stock, but all subsequent creditors as well as the claims of the farm mortgagers.

Now Mr. McGregor might be mistaken as to his speculations and opinions about many points discussed by him in such authoritative style, but the last above quotation presents him in a strain of misrepresentations that no charity can overlook.

Mr. McGregor is an Attorney at Law, and must have known that a sale of the road on a judgment did not wipe out or extinguish the stock of the Company—that the sale was to him who would take it for the least time, and pay the judgment; after which the road would come back into the hands of the Company. When we find Mr. McGregor so grossly misrepresenting a thing that must have been within his knowledge, we are prepared to take all his statements, with some allowance.

The above are a few of the "particular matters" which I would thank Mr. ex-Director and Attorney McGregor to explain.

If he shall succeed in explaining to the farm mortgage, and stockholders, how he has tried to protect their interests; while he was doing everything to aid the 3d mortgage foreclosure, which was to, and, it is claimed, did extinguish all rights of the stockholders, no one will be more happy than I shall, to acquit him of what, at present, looks much like having sold himself and his trust to the enemy.

Mr. McGregor may complain that so much villainy has gone unwhipped of justice; while he is to be thus criticised for milder faults.— But Mr. McGregor has allowed himself to be a tool in the hands of greater scoundrels than are to be found outside of prison walls; and now it is too late for him to wash his hands and "cry for mercy."

One word as regards myself. The friends of this great 3d mortgage swindle, are industriously circulating the report, among the unfortunate stockholders of the company, that I am figuring for black mail, and will sell them as soon as I can get my price. Now, stockholders, I would refer you to my former business transactions in this State, for the last six years, to see if there is anything to warrant you in believing this libel against me.

The fact is, the course that these gentlemen are pursuing, in trying to destroy your confidence in my integrity, is their only hope in escaping the just punishment of their crimes. Brother stockholders, you need not fear that I will sell you out, while I have life, health and means. I will devote my time, means and what little ability I possess, in trying to save something of your misapplied property.

NEWCOMB CLEVELAND.

Newhall House, Milwaukee Aug. 11, '59

MONETARY AND COMMERCIAL.

Since our last review there has been quite an improvement in the ordinary collections and the influx of currency. This has given a better tone to the money market, and matters have become materially easier. There is yet, however, a great deal of circumspection and selection exercised by discount houses, and much good paper is yet offered outside. The offerings embrace all departments of business, and entirely devoid of any speculative movement. There has been no change in quotations.

Eastern Exchange is more active and prices firm. We quote buying $\frac{1}{2}$, selling $\frac{1}{4}$ premium. New Orleans dull, $\frac{1}{2}$ dis. buying, par selling.

Missouri currency sell at $1\frac{1}{2}$ dis., and Illinois and Wisconsin at $2\frac{1}{2}$ dis.

The crop news from Europe, by the recent arrivals, show that the leading staples will yield at least an average. Prices rule low and the demand inactive.

The N. Y. *Courier and Enquirer* of Monday, says, "the Stock market to-day shows a marked improvement in prices, carrying, in some instances, quotations higher than they have been since the rise which took place in the latter part of July. Michigan Southern Preferred, which has lately been a well-abused stock, has the greatest improvement, and also heads the list in point of activity. N. Y. Central is the next prominent stock, and also shows an advance. State stocks are unchanged and less active than yesterday."

Statement of the value of foreign imports at New York for the week ending Aug. 20, compared with the years 1857 and 1858:

	1857.	1858.	1859.
Dry Goods.....	\$2,519,736	1,230,432	3,345,128
Genl. Merchandise....	1,937,584	1,694,948	2,555,351
Total for the week....	\$4,457,320	2,925,380	5,900,479
Previously reported....	157,373,658	87,383,468	164,203,773

Since Jan. 1.....\$161,830,978 90,308,448 170,104,252
Messrs. Duncan, Sherman & Co. are now paying the August dividend of the New York Central Railroad Company. This, on a capital of \$24,182,400, amounts to \$725,472. On about three-fourths of the stock the dividends are payable here.

The earnings of the Ohio and Mississippi R. R. Co. for the month of July, were:

Passengers.....	\$70,304 40
Freight.....	35,263 90
Express.....	3,172 50
Mail.....	6,633 33

Total.....\$115,874 13

The earnings of the Eastern Division, in July, 1859, were.....\$69,702 99

July, 1858.....62,045 79

Increase.....\$7,659 20

The receipts of the Grand Trunk Railway of Canada for the week ending July 30,

were.....\$44,364 69

Week ending July 31, 1858.....39,329 55

Increase.....\$4,935 14

Total traffic from July 1st.....172,389 53

Same period last year.....164,612 58

Increase.....\$7,782 95

The traffic of the Great Western Railway, of Canada, for the week ending August 5, 1859, was as follows:

Passengers.....	\$20,799 15
Freight and live stock.....	9,507 62
Mails and sundries.....	1,387 50

Total.....\$31,664 62

Corresponding week of last year.....32,187 57

Decrease.....\$512 95

The earnings of the Central R. R. Co., of New Jersey, for the month of July, 1859,

were.....\$80,600 00

For July, 1858.....77,285 84

Increase.....\$3,314 16

The official earnings of the Central Ohio R. R. for June, 1859, were:

From passengers.....	\$19,039 53
From freight, mail, &c.....	24,779 74

Total.....\$43,833 27

The total expenditures for July were.....35,887 60

Leaving as net earnings.....\$7,945 67

The following statement shows the business of the Philadelphia and Reading Railroad Company, for the month of July, 1859, compared with the corresponding month of last year:

	1859.	1858.
Received from coal.....	\$266,448 81	184,295 60
Do. merchandise.....	23,612 98	29,804 60
Do. travel, etc.....	27,392 84	34,761 52
Total.....	\$257,454 64	248,861 72

Transportation, roadway, dumpage, Renewal Fund, and all charges.....130,267 57

Net profit for a month.....\$127,187 07

Do. for previous 7 months.....519,353 43

Total net profit for 8 months.....\$646,540 50

The earnings of the Watertown and Rome R. R. for July were as follows:

	1859.	1858.
From passengers.....	\$12,174 48	12,232 65
From freight.....	14,886 42	17,500 99
From other sources.....	3,690 01	1,328 27
Total.....	\$30,150 91	31,061 91

The earnings of the Stonington R. R. Co. in July, 1859, were.....\$24,756 97

July, 1858.....19,937 44

Increase.....\$4,819 53

The receipts of the New Haven, New London and Stonington road were,

In July.....\$12,242 49

July, 1858.....8,442 90

Increase.....\$3,799 59

Extension road.....2,500 00

Increase.....\$6,299 59

The earnings of the North Pennsylvania R. R. were:

For July, 1859.....\$26,387 31

For July, 1858.....25,073 11

Increase.....\$1,354 20

For 8 months, to July 31, 1859.....214,042 31

Same time last year.....181,499 93

Increase.....\$32,542 17

The earnings of the New York and Harlem R. R. for the month of July, 1859, were.....\$91,189 78

For the same month last year.....88,522 46

Increase.....\$2,667 32

The earnings of the Little Miami and Columbus & Xenia R. R. for July, 1859, were.....\$90,871 93

For the same month last year.....85,524 59

Increase.....\$5,347 34

The earnings of the Cincinnati, Hamilton and Dayton R. R. for the month of July, 1859, were.....\$51,241 50

For the same month last year.....35,161 15

Increase.....\$16,080 45

The revenue of the Baltimore and Ohio R. R., for July, 1859, was:

	Passengers.	Tonnage.	Total.
Main Stem.....	\$59,982 35	297,296 42	268,278 77
Wash. Branch.....	26,467 80	6,472 42	32,940 22
N. W. V. Branch.....	2,179 77	8,535 66	10,715 43

Total.....\$88,629 92 222,304 50 310,934 42

Compared with the same month in 1858, the returns show the following result:

	June 1859.	June 1858.	Decrease
Main Stem.....	\$267,278 77	303,701 44	36,422 67
Wash. Branch.....	32,940 22	38,222 49	5,282 27
N. W. V. Branch.....	10,715 43	16,680 72	5,965 29
Total.....	\$310,934 42	358,604 65	47,670 23

The above table shows a decrease in every department of the road of \$47,670 23 as compared with July, 1858.

The financial year of the company commenced with October. Comparing the revenue so far of the present with that of the past fiscal year, the following result is shown:

	1858.	1857.
October.....	\$392,563 02	396,191 84
November.....	333,159 92	361,443 38
December.....	336,861 01	379,239 02

1859.

January.....327,176 63 317,513 73

February.....321,391 10 237,035 49

March.....410,061 21 439,256 23

April.....369,067 31 483,558 45

May.....397,050 53 397,770 07

June.....359,069 01 400,730 00

July.....310,934 42 358,604 65

Total.....\$2,608,142 29 \$3,814,362 87

Decrease present year.....206,220 58

The earnings of the Delaware, Lackawanna and Western R. R. for six months ending 30, 1859, including receipts from the sales of coal, were.....\$2,053,146

The expenses, and paid out for coal, &c., were.....1,602,453

Net earnings.....\$392,690

The gross earnings of the Memphis and Charleston Road for the year ending June 30, 1859, were.....\$1,330,812 40

The total working expenses have been.....552,726 40

Net earnings.....\$778,086 00

or $12\frac{1}{2}$ per cent. on \$6,188,033, which is the whole cost of the road and outfit to the present time.

The earnings of the Macan and Western R. R. for July, were:

1859.....\$25,662 41

1858.....21,724 44

Increase.....\$3,937 97

Earnings, July.....25,662 41

Expenses, do.....11,701 39

Net earnings.....\$14,361 02

The earnings of the Cleveland and Mahoning R. R. for July were:

Passengers.....\$4,521 01

Freight.....9,116 56

Coal.....8,591 82

Mail.....262 50

Expenses.....\$22,491 89

Net earnings.....\$14,455 76

The earnings of the Pacific Railroad of Missouri, for July, 1859, were:

Passengers.....\$24,602 63

Freight.....16,056 09

Mails.....2,737 50

Earnings for July, 1858.....\$42,696 22

40,875 23

Increase.....\$1,820 99

NEW YORK RAILWAYS.—We condense from the State Engineer's Report upon the New York Railways the following interesting statistics in regard to the operations of sixty-one roads, that make returns more or less complete. The aggregates appended are for 1858:

The amt of capital stock as per charter is.....	\$91,575,600 00
Capital stock subscribed.....	79,730,160 98
Capital stock paid in.....	74,634,956 76
Amount of funded debt.....	71,780,588 98
Amount of floating debt.....	2,846,726 97
Total funded and floating debt.....	74,627,355 21
Total cost of construction and equipment.....	131,907,445 21
Same, excluding city roads.....	125,673,010 70
Length of roads in operation (excluding city roads), miles.....	2,397 62
Number of locomotive engines.....	738
Number of first class passenger cars.....	1,071
Number of second class and emigrant cars.....	175
Number of baggage, mail and express cars.....	239
Number of freight cars.....	9,014
Av. speed passenger trains, including stops, miles per hour.....	20 72
Av. speed when in motion, miles p. hour.....	25 53
Av. express speed incl. stops, miles p. hour.....	25 44
Av. express speed when in motion, miles per hour.....	29 30
Av. freight speed incl. stops miles p. hour.....	10 69
Av. freight speed when in motion, miles per hour.....	13 95
Av. weight of passenger trains empty, tons.....	73 00
Av. weight of freight trains empty, tons.....	129 27
Number of passengers carried in the cars (excluding city roads).....	11,250,973
Tons of freight carried in the cars.....	3,433,725
Total earnings for all roads.....	\$20,309,653 85
Total payments by all roads.....	19,709,079 27
Average cost per mile of railway.....	53,916 23
Average cost per mile of single track.....	34,206 05
Average distance traveled p. passenger, mls.....	33 17
Average passengers per train.....	60 72
Average distance traveled per ton of freight, miles.....	120 91
Average tons per freight train.....	77 54
Average cost per mile of road—	
For maintenance of way.....	\$1,511 70
For repairs of machinery.....	892 47
For transportation.....	2,419 49
Total receipts per mile of road.....	6,898 96
Total expense per mile of road.....	4 3 50
Net income per mile of road.....	2,523 36
Average receipts p. passenger p. mile, cts.....	1 98
Average expense p. passenger p. mile, cts.....	1 49
Av. net income p. passenger p. mile, cts.....	0 49
Av. receipts p. ton of freight p. mile, cts.....	2 50
Av. expense p. ton of freight p. mile, cts.....	1 64
Av. net inc. p. ton of freight p. mile, cts.....	0 86
Dead weight moved p. passenger car'd. ton.....	1 23
Dead weight moved p. ton of fr. car'd. tons.....	1 66
Per cent. of operating cost to income.....	64
Net income per cent. on cost.....	5 7

TEXAS CENTRAL RAILROAD.—We have the extreme pleasure of announcing that the Central Railroad is now completed to the 75th mile, and through the energy of Mr. Bremond, who deserves great credit, it was done in time to save the land bonus and loan. The work beyond still progresses. Some ten miles are already graded and as the iron for that distance is purchased, we may expect to see the 85th mile reached in time for the spring trade. This will be good news to all the upper country. The bridge across the Navasota is not quite done yet, though we are assured that it will be in time for the fall trade. This will save a great deal hauling over bad roads, and be a very appreciable help to the people above that point. The eastern branch proposed from the Navasota is favored very strongly, and we hope to say something shortly to get this more prominently before the people. The Brazoria road is coming along and we understand that about thirty-two miles are now completed. The B. B. & C. road is completed beyond the San Brenard, and track laying is going on. A good deal of interest is now manifested in favor of this road in Fayette county, and hopes are indulged of bringing it speedily into that county. Altogether the railroad spirit is still growing upon the people.—*Houston Telegraph*, Aug. 10.

LUBRICATING RAILWAY BRAKES.—According to an invention patented for a correspondent by Mr. Johnson, it is proposed to use, in connection with any suitable lubricating apparatus, a capillary pad or cushion composed of wool, cotton, or other suitable material, and combined with a metallic conducting spout, which is pressed against the underside of the enlargement or shoulder of the journal of the axle or shaft. This pad sucks up the excess of oil which always collects at that point, and causes it to return either to the elevator or reservoir, so that there will be no waste of oil beyond a few drops occasionally. The pad should always be placed above the level of the oil, so that it will remain in a comparatively dry state.—*London Mining Journal*.

RECEIVER'S SALE.

BY virtue of a Judgment of the Court of Common Pleas, of Muskingum County, Ohio, rendered in a certain case therein pending, in which the "Clinton Bank of Columbus is Plaintiff, and Douglas, Smith & Co., and others, are Defendants, I will offer for sale, at the Court House, in the City of Zanesville, in the said Muskingum County, at the hour of one o'clock, in the afternoon, on the 13th day of September next, the following described parcels of land, situate in the Western Addition to the said City of Zanesville, as the same is designated and delineated upon the plat of said addition, recorded in the Recorder's office, of said county, in the Record of Plats, Book No. 1, page 13, &c.; that is to say, Lots Nos. 1, 2 and 3, of square 17, in said "Western Addition," appraised at \$150 each. Lots Nos. 4, 5 and 6, of said square 17, together with the strip of land between the south-eastern ends of the said lots, and lots Nos. 10, 11 and 12, in the said square, said strip of land being about 16 feet wide, with the buildings erected on the said lots and strip of land, and the fixtures and appurtenances thereunto belonging, appraised at the sum of \$6,500.—There are erected on the said lots, a brick shop, for the manufacture of passenger cars, 120 feet by 50 feet, roofed with slate, and also a wood car shop, 120 by 40 feet; steam engine and Boilers; 2 Daniels' Planing Machines; 1 upright saw; 1 Turning Lathe, Shafts, Cones, Pulleys, Hangers, &c., connected with said machinery.

Lots Nos. 7, 8, 9, 10, 11 and 12, of said 17th square, with the buildings erected thereon, and the fixtures and appurtenances thereunto belonging, appraised at \$7,000. There are erected on said parcels, a Brick Machine Shop, 80 feet by 40 feet; a Forge Shop, 40 feet by 40 feet, containing 8 forges; a Carpenter Shop, 120 feet by 26 feet. Foundry buildings, one Lathe, 6 feet swing; 1 Boring Machine; 1 large Screw Cutting Machine; 1 Planing Machine; 3 Hand Lathes; 1 large Drill Press; 2 small Drill Presses; 1 wheel press; 1 Foundry Fan; 2 Screw Cutting Machines; 1 small Drill Press; Shafts, Pulleys, &c., used with said machinery.

Lots Nos. 1, 2, 3, 7, 8, 9, 10 and 11, of square 21, in said Western Addition, appraised at \$150 each. Lot No. 4, in said square 21, on which is erected small dwelling house, appraised at \$250.

Lots Nos. 5 and 6, in said square 21, with the buildings thereon, and the fixtures and appurtenances thereunto belonging, appraised at \$800, on which lots is erected a large Foundry building, with Crane, Cones, &c.

Lot No. 12, in said square 21, on which is erected a stable, appraised at \$250.

Lots Nos. 1, 2, 3 and 4, in square 16, in said Western Addition, on which is erected a large frame building, appraised at \$1,000.

Lots Nos. 5, 7 and 8, in said square 16, appraised at \$150 each.

Lot No. 6, in said square 16, appraised at \$175.

The said parcels of land are situated on the line of the Central Ohio Railroad Company, on the west side of the Muskingum River, and immediately opposite the city of Zanesville, and formerly occupied, in part, by the Machine Shops, Foundry, Car Manufactory, &c., of Douglas, Smith & Co., known as the "Muskingum Works." The "works" are well arranged and convenient, and have capacity for a force of from 100 to 150 men. The location is healthy, and the facilities for procuring pig iron, coal, &c., &c., render the location one admirably adapted for such "works." Terms Cash.

And I will also, on the 14th day of September, 1859, at one o'clock, P. M., at the said "Muskingum Works," offer for sale the following personal property used in said "works," to wit:

2 Axle Lathes, 42 inch swing; 1 Axle Lathe, 26 inch swing; 1 Slide Lathe, 20 inch swing; 1 Slide Lathe, 13 inch swing; 1 Slotting Machine; 1 small Slide Lathe; 2 Slide Rests; 1 Grind-stone, with shafts and fixtures; 8 Blacksmith vices, work benches and clamps; 1 Screw Cutting Machine, No. 40; 12 large Anvils; 13 sets Blacksmith Tools; 2 Ripping Saws; 1 Cut-off Saw; 1 large and 1 small Tenoning Machine; 1 Tongue and Grooving Machine; 1 Mortising and 1 Boring Machine; 1 Caul.

Terms Cash.

JOHN TAYLOR, Jr., Receiver.

Aug. 4, 15

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co., Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase Aug. 4, m. 6.

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL RAILROAD

AND PANA OR SANDOVAL

FOR

Decatur, Springfield, Peoria, Quincy, Rock Island, Galena, Dixon, Prairie du Chien, St. Anthony, St. Paul, and And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANA for all the above points.

Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via

PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all

TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,

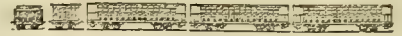
Gen'l Southern Agent, Cincinnati.

W. P. JOHNSON,

Gen'l Passenger Agent, Chicago.

June 21, 1859.

Cincinnati, Hamilton and Dayton



RAILROAD.

FOUR TRAINS

LEAVE THE SIXTH STREET DEPOT DAILY.

TRAINS RUN THROUGH TO RICHMOND, LIMA, SANDUSKY, AND DELAWARE WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND NORTH-WESTERN CITIES.

(Columbus time, which is seven minutes faster than Cincinnati.)

G. A. M. EXPRESS TRAIN.—For Cleveland and Pittsburgh, via Delaware, makes close connection at Crestline for Pittsburg, Baltimore, Philadelphia, and New York; and at Cleveland for Dunkirk, Buffalo, Boston and New York. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 7:20 P. M., Quincy and Galena at 7 A. M. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Muncie. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

S. A. M. MAIL TRAIN.—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STEAMER FOR DETROIT; at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at DELAWARE with the C., C. and C. Road, for Cleveland and points East. Also connects with Junction Railroad at Hamilton for Oxford.

4:30 P. M. TRAIN.—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Also, connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago. Also connects with Junction Railroad at Hamilton for Oxford.

6 P. M. TRAIN.—For Dayton, Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 8 A. M.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; at the new Ticket Office on West side of Vine street, between the Post Office and the Burnet House; or at the Sixth Street Depot. D. McLAREN, Superintendent.

FREEDOM IRON COMPANY,

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods,

Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Milfin Co., Penn.

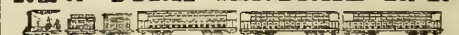
JOHN A. WRIGHT, Sup't.

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works. June 9.

New Time Table

OF THE

NEW YORK CENTRAL R. R.



	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp.	7 00 A. M.	7 00 P. M.	7 00 P. M.
Mail	9 00 A. M.	12 50 P. M.	
New York Exp.	11 15 A. M.	9 00 P. M.	9 00 P. M.
Night Exp.	5 00 P. M.	4 00 A. M.	4 00 A. M.
Utica Accom'n.	6 00 P. M.	Ar. U. 10 00 P. M.	
N. Y. Mail	11 15 P. M.	10 00 A. M.	10 00 A. M.
	Leave Buffalo.	Leave Bridge.	Arr. Alb'y
New York Exp.	5 15 A. M.	5 15 A. M.	3 30 P. M.
Steamboat Exp.	8 00 A. M.	8 00 A. M.	8 00 P. M.
Mail			2 30 P. M.
Cleveland Exp.	6 00 P. M.	6 00 P. M.	4 40 A. M.
Cincinnati Exp.	11 00 P. M.	11 00 P. M.	8 30 A. M.
Utica Accom'n.			10 00 A. M.

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; and lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circular which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the retort is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet,.....	\$300 00
do do do 350 " " " " " " " " " "	350 00
do do do 400 " " " " " " " " " "	375 00
do do do 500 " " " " " " " " " "	450 00
do do do 600 " " " " " " " " " "	525 00
do do do 700 " " " " " " " " " "	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or for their village works, as now in operation in several States, apply to

R. T. COVERDALE,

167 Walnut Street, Cincinnati, Ohio,

who has the exclusive right to manufacture and sell in the State of Ohio.

Feb. 24th, 1859.

APPLEGATE & CO.,
Booksellers, Publishers, Stationers & Blank Book Manufacturers,
43 Main St. Cincinnati, O.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Booksellers, Country Merchants, Teachers, and others to extensive stock of School, Classical, Theological, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the leading publishers, as well as the principal manufacturers of Paper and Stationery, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

BOOKSELLERS,

Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, Envelope, Manilla, and Tea wrap-boards, Envelopes, Gold and steel Pens, Penholders, Copying Books, Ink and Stands, Erasers, Sealing Slates, Mucilage, Book rests, Bill envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files: Date Calendars, together with all other articles used in the counting-house.

Stationers,

To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly pagged, including all sizes, from the small memorandum book to the large Imperial Ledger, and a great variety of styles and workmanship, order of any description, with or without printed headings, and warranted to be of the best quality of paper, and durability of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

BLANK BOOK MANUFACTURERS,

We are prepared to print and bind books of any description and in any style desired, at rates as low as the quality of work executed in this branch of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Freight Receipts, and other descriptions of printing, will find that we do such jobs with neatness and despatch. Orders re-

Publishers,

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, *Clark's Common-sense*, *Dick's Works*, *Lin's Ancient History*, *Plutarch's Lives*, *Josephus*, *Spectator*, *Chain of Sacred Wonders*, *Familiar Science*, *Webb's Monitor*, *Soden's German*, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive,

Books of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

W. HARVEY'S SAFETY JOINT For Coupling the Ends of "T" Rails. PATENTED, NOV. 2, 1858.

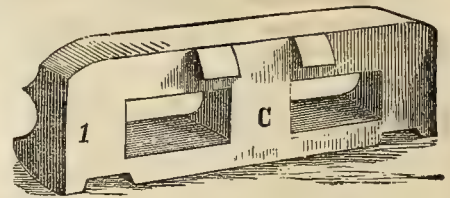


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

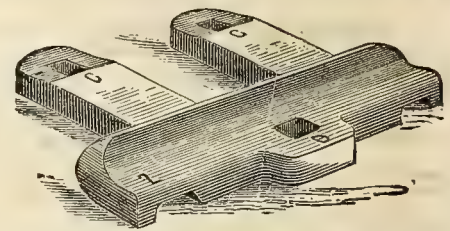
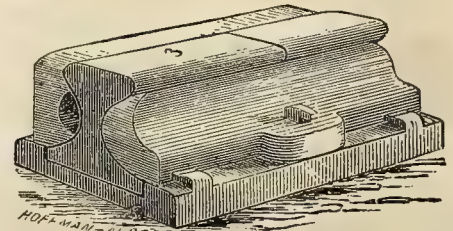


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. A. d. its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that one part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly free road, thereby doing away with the breaking of rails, wheels, and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear of the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
41 Jefferson-street, Albany, N. Y.
T. WRIGHTSON, AGENT. Cincinnati, O.

43 MAIN STREET ()

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of Foreign and Domestic Letter Postage; Rates of
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of the Laws and Regulations of the Post-Office De-*
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This work has been carefully compiled and corrected by
E. PENROSE JONES, Esq., late Assistant Post-Master of the
Cincinnati P. O., from the Records in this Department, and
other sources, and contains the most complete list of Post-
Offices especially of the Western, North-Western, and
South-Western States, yet published.

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The entire matter is kept standing in type, and as the com-
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MACHINE, have introduced a new style, working upon the
same principle, and making the same stitch, though not so
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Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALIKE ON
BOTH SIDES, impossible to ravel, and leaving no chain or
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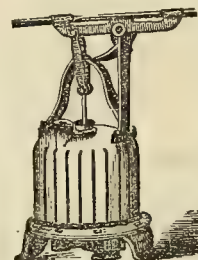
1,200 Kegs No. 1 Railroad Spikes, 5 1/2 by 9-16th
Corby, Gossin & Co.'s make, for sale very
low by
TRABER & AUBERY,
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172 Elm Street, bet. 4th and 5th,
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action
SUCTION & FORCE PUMP

AND
Compound Steam Pumping Engine,



WOULD respectfully invite
the attention of RAILROAD
Companies, Manufacturer
Distillers, Miners, and the pub-
lic generally to these Pumps
as the best Pump now in use
and acknowledged by all who
have used them to be perfect-
are simple in their construc-
tion, compact, durable and not
likely to get out of order; well
adapted for Steamboats, Rail-
road Water Stations, Distill-
eries, Breweries, Furnaces,
Mines, Rolling Mills, Paper
Mills, Factories, Wells, Cis-
terns, Stationary Fire Engines, Garden Engines and, in
all purposes where a Pump can be used. Also, for forc-
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rapidly.

Also, McGowan's Patent Ball Valve Pump, designed
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Full and perfect satisfaction guaranteed in all cases,
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Orders thankfully received and promptly filled at the
shortest notice.

SILVER MEDAL. (The highest prize) awarded
the McGowan's Compound Steam Pumping Engine at the late Fa-
Ohio Mechanics' Institute. June 18, 1855-13,

MOSELEY'S TUBULAR WROUGHT IRON



ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE
now been fully tested in this vicinity, and it is
universally conceded that they can not be excelled.
The Roofs, are wholly of Wrought Iron, or mixture of
Wood and Iron; Sheeting always Iron.

The bridges are wholly Wrought Iron except the floor,
which is wood, like the floors of ordinary Bridges.
We are prepared to make these structures in any
quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per
foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs.
\$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100
square feet, part wood and part iron, from \$12 to \$20
per square.

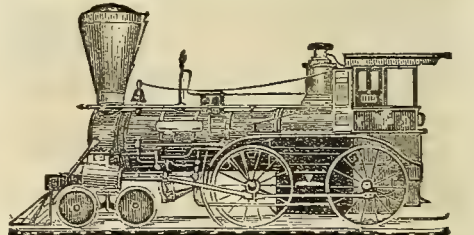
Increase of span of bridges, or width of buildings
makes an increase of price, but the increase in price is
no more than the increase of wooden structures.



We can furnish iron of every size to work into
Bridges and Roofs, and Railroads or other companies
buying the right to use them and the iron of us, can
make their own structures, one third less than the
above prices. Our structures weigh only from 1-4 to
1-10 that of wood; difference in freight in a long dis-
tance buys our work. In a few days we will have at
our factory, 497 West Third Street, in this city four
different specimens of our Roof, where the public can
inspect them to their satisfaction. We beg them to
give us a call, as all our work is warranted, and we ask
no pay on ordinary jobs until the work is done and ap-
proved, payments being secured on contracting.

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CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotiv
equal in efficiency and durability to the best Eastern
manufacture. Also, Shaping and Slotting Machines
suitable for railroad shops. Also, all kinds of heavy
forging and casting done at short notice. Also, bolts for
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P. DUDLEY,
President of the Board;

Jan. 5th.

The Railroad Record.

E. D. MANSFIELD, } Editors.
T. WRIGHTSON, }

CINCINNATI:

Thursday Morning, Sept. 1, 1859.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.

One square, single insertion,.....	\$1 00
“ “ per month,.....	3 00
“ “ six months,.....	12 00
“ “ per annum,.....	20 00
“ column, single insertion,.....	5 00
“ “ per month,.....	10 00
“ “ six months,.....	40 00
“ “ per annum,.....	80 00
“ page, single insertion,.....	15 00
“ “ per month,.....	25 00
“ “ six months,.....	110 00
“ “ per annum,.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

THE European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

The business of the Cleveland and Toledo Railroad for 12 months ending April 30, compares as follows:

Earnings—	1859.	1858.	Decrease.
From passengers..	\$485,537 45	589,370 41	102,832 96
From freights, etc.	312,618 20	341,882 05	29,263 86
Total.....	798,155 95	930,252 46	132,096 51
Expenses.....	383,699 73	496,462 01	112,762 28
Net earnings.....	\$414,455 92	433,790 45	19,334 53

We learn from the Portland (Me.) Advertiser that the Grand Trunk Railroad Company, one branch of whose road connects Portland with Montreal, are rebuilding the bridges along the line with iron structures. Some of these cost as high as \$75,000, and we are glad to see that most of the iron for these great works is procured in Pennsylvania. One great argument in favor of our market is, the super-excellent quality of Pennsylvania iron, which will so much outlast English iron. The same fact is patent on the Georgia Central Railroad, as has been made to appear by the statement of the Superintendent within the last few weeks. We see also that the Pennsylvania road is putting in new iron bridges along their line of travel from Altoona to Hunington. The vast number of lives which have been sacrificed at such places as the Norwalk and Des Jardines bridges, and recently on a road in New York, incites companies like the Pennsylvania, which very seldom have accidents, to provide against the possibility of mishap. What with iron bridges, and those of Pennsylvania iron, accidents will be reduced to a minimum with any due degree of care on the part of employees.

CAN RAILROADS MAKE MONEY.

There are a number of roads in the United States, whose stock is not in market, which publish no printed reports, and whose affairs are, therefore, scarcely known to the public; which make large profits, and whose stockholders are satisfied to keep their stock.

But this is not the class, which figure before Brokers' Boards, and are seeking notoriety. The latter class are roads whose stock is in the hands of speculators, who care nothing for the interests of the road whatever, and who only gamble in stock. It is much to be regretted, that railroad stock is so largely the subject of speculation. Had the roads been managed by honest, *bona fide* holders of stock, they would have done much better than they have done; and their reputation, as property investments, would have been much higher. As examples of roads which have been carefully managed, by their *real owners*, we shall give some examples, to prove, that railroads can make money. It is true, we shall take the examples from the class of good roads. But, may it not be asked, what has made them good roads? Is it not mainly the economy and care of their construction, and the skill of their management?

1. OF THE CLEVELAND, COLUMBUS AND CINCINNATI RAILROAD.—The practical operations of this road, we have already exhibited, and shall now only refer to that part of them, which relates to profits. On the 1st of July, 1858, the entire cost of this road was \$4,752,319. Taking this as the actual capital invested, the *profits* made for five years, being the *net* receipts, were as follows, viz:

In 1853.....	\$564,089
In 1854.....	572,111
In 1855.....	732,056
In 1856.....	700,805
In 1857.....	514,740

Aggregate.....\$3,083,801

This is an average of \$616,760 per annum, which is just 13 per cent. on the capital. Suppose then that 7 per cent. on capital is a fair income, (and it certainly is; for money will not command more than that, in a *safe* business;) then 6 per cent. per annum is added to the capital; or, in other words, *sinks* so much of the original capital. The Cleveland Road then made 7 per cent. on its capital; and accumulated 30 per cent. (in five years) towards reducing the original capital. An *original* stockholder of the Cleveland and Columbus Road, then, has received full income on his stock, and has now paid but 70 per cent. (deducting 30 per cent. made,) for it. The road is now making more than 10 per cent. net; so that, he is now receiving 15 per cent. on his outstanding capital. At the end of eight years more, this road will have *paid off the entire capital, and seven per cent. interest on the capital*. Certainly there are few companies in the world doing better than this.

2. LITTLE MIAMI ROAD.—The cost of this road on the 1st of July, 1858, was \$3,560,

000, which, although greater than it had been in previous years, in consequence of making a double track, may be taken as the sum on which dividends have been made. The *net* receipts of this Company for seven years, have been as follows, viz:

In 1852.....	\$314,670
In 1853.....	352,132
In 1854.....	336,708
In 1855.....	340,422
In 1856.....	363,134
In 1857.....	332,498
In 1858.....	414,168

Aggregate.....\$2,553,732

This is a little more than two-thirds the entire cost of the road. The average is \$364,819 per annum, or 10½ per cent. Now, supposing as before, that 7 per cent. net is the worth of money. This road has cleared 3½ per cent. on its capital above, an ample income; i. e., in seven years 24½ per cent. has been accumulated, (or, might have been,) as a sinking fund. To the original stockholders, then, the cost of the stock is but 75½ per cent.; and as the road makes 10 per cent. on the capital, the stockholders are now receiving 13 per cent. on their real outlay. The same rate per cent. has been made on the Columbus and Xenia Road. Taking the whole line from Cincinnati to Cleveland, which is 254 miles, and we have this result:

	Cost.	Average Income.
Cleveland and Columbus.....	\$4,752,319	\$616,760
Columbus and Xenia.....	1,290,181	182,419
Little Miami.....	3,560,000	564,819
Aggregate.....	\$9,602,500	\$1,163,988

The net income of this line of road is, therefore, 12 per cent. Taking seven per cent. as the standard, this road makes five per cent. above a full income, which, if it be added to the Sinking Fund, will extinguish the entire cost of the road in fifteen years, besides paying seven per cent. income on the capital.

These examples are sufficient, for the present; but, if we chose, we could point out an hundred railroads, which pay more than an average income. The Stock of the Little Miami is worth *for an investment*, 140 cents on a dollar. We believe it is selling for 80 cents. We know of no better investment in the country; and there are hundreds of speculators, investing tens of thousands in various schemes, who, at the end of ten years, will not have made as much out of their capital, as they would do, by investing in what are now deemed only tolerable railroads. It is true, that the owners of roads have had to exercise a great deal of patience and prudence. But if they do not fall into the hands of the Bondholders, they will, in the end, realize all they hoped for. We except, of course, roads that have been made where they are not needed.

STREET RAILROADS.—The Cincinnati Street Railroad Company “broke ground,” in front of our office, on Monday last, and are now at work in right good earnest. The road is intended to pass along Walnut, Ninth and Freeman Streets to the Brighton House, and will be completed in about sixty days.

RUNNING OPERATIONS OF THE NEW YORK AND ERIE R. R.

The following statement made of the running operations of the Erie Road, for six months, ending 1st of April, which we take from the *American Railroad Journal*, will serve as another illustration of the proportions of railroad receipts and expenses, in regard to details. The result of the operation of this road for six months ending March 31st, last:

RECEIPTS AND EXPENSES FOR THE HALF YEAR.

	1859.	1858.
Freights.....	\$1,697,944 74	\$1,928,692 75
Passengers.....	507,917 84	525,533 76
Storage.....	788 64	704 24
Telegraph.....	4,660 34	4,617 64
Rents.....	11,471 45	6,196 09
Hire of Cars.....		566 11
Mails.....	47,295 50	46,793 00
Total.....	\$2,269,958 55	\$2,523,143 59
Expenses, including taxes, etc.....	1,509,048 69	1,800,671 41
Net earnings.....	\$760,939 86	\$722,472 18

Half year ending March 31.

	1859.	1858.
Office and Station Expenses.....	\$22,209 34	\$24,087 30
Agents and clerks.....	68,625 09	71,475 59
Labor, loading, unloading.....	58,340 92	72,487 14

Cost of running.

Porters, watchmen, etc.....	25,979 64	32,060 37
Wood, water, etc.....	3,868 63	4,864 49
Fuel, first cost, etc.....	186,460 09	248,708 51
Passenger conductors, etc.....	31,764 00	33,471 29
Freight do.....	47,634 43	59,598 47
Passenger enginemen, etc.....	29,239 99	33,660 79
Freight do.....	62,583 82	63,589 46
Oil for passenger eng. etc.....	8,282 59	8,932 72
Do. freight do.....	15,812 12	18,006 96
Do. passenger cars, etc.....	1,317 83	1,950 15
Do. freight do.....	9,004 25	12,866 26

General Expenses.

Loss of goods, etc.....	4,792 81	13,839 47
Damage for injuries to persons.....	2,235 93	11,503 32
Damage to property.....	9,079 09	1,994 70
General superintendence.....	29,121 17	30,323 27
Contingencies.....	25,358 82	53,336 59

Repairs of engines and cars.

Engines and tend., passenger.....	40,669 67	62,738 39
Do. freight.....	80,610 93	135,308 42
Passenger and bagg. cars.....	48,528 19	73,654 06
Freight cars.....	115,307 67	167,477 82
Tool and machinery in shops.....	11,131 76	16,644 04
Incl. expenses about do.....	12,014 19	16,987 80

Repairs of Track and Railroad.

Road bed.....	43,038 48	30,063 55
Track.....	332,926 34	315,516 25
Fences, gates, etc.....	4,224 37	4,174 02

Repairs and structures.

Truss bridges.....	32,985 46	29,404 56
Pass. wood and water stations.....	19,484 42	10,947 36
Engine and car H. W. Wps.....	8,069 31	7,417 45
Rents, (dwelling).....	154 31	342 08

Incidental.

Superintendence and office exp.....	1,263 00	347 50
Contingencies.....	1,139 62	9,616 83

Miscellaneous.

Ferry.....	\$55,615 20	49,347 11
Expenses operating telegraph.....	18,964 66	23,268 11

Total.....	\$1,477,848 69	\$1,743,007 40
Rent of Union Railroad.....		\$41,000
Interest on floating and funded debt, partly estimated.....		925,000
Sinking fund.....		210,000

Total.....	\$1,176,700	\$1,760,000
Net earnings as above.....		760,939

Deficiency.....		\$414,761
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STATEMENT OF MONTHLY RECEIPTS.

	1858. October.	1858. November.
Freight.....	\$33,775 10	\$33,694 39
Passengers.....	115,242 23	109,658 62
Storage.....	129 44	226 63
Telegraph.....	720 55	840 83
Rents.....	179 46	2,813 46
Mails.....	7,867 58	7,867 59
Total.....	457,924 36	440,101 52
Expenses, including taxes, estimated.....	308,843 15	295,600 95
Net earnings.....	149,081 21	150,500 57

	1858. December.	1859. January.
Freight.....	297,590 57	237,146 20
Passengers.....	75,939 40	64,340 29
Storage.....	132 91	57 94
Telegraph.....	768 88	838 08
Rents.....	1,126 76	
Mails.....	7,867 58	7,867 58
Total.....	383,426 10	309,250 09
Expenses, including taxes, estimated.....	280,420 07	212,028 35
Net earnings.....	103,006 03	97,221 74

	1859. February.	1859. March.
Freight.....	\$328,377 65	\$268,360 83
Passengers.....	58,485 58	93,251 76
Storage.....	60 62	171 10
Telegraph.....	702 70	789 20
Rents.....	5,504 89	1,846 88
Mails.....	7,867 59	7,867 53
Total.....	300,999 30	372,287 45
Expenses, including taxes, estimated.....	195,856 87	216,299 30
Net earnings.....	\$105,142 16	\$155,988 15

From this table, we find the following proportions for the expenses of the road:

Repairs.....	52 per cent.
Employees.....	22 " "
Fuel.....	7 " "
Oil, Tallow, etc.....	3 " "
Telegraph.....	14 " "
Damages.....	1 " "
Stations and fences.....	2 " "
Miscellaneous.....	11½ " "

This statement proves beyond a doubt, what we have previously shown, that the great improvement in railroad expenses is to be made in repairs. We doubt not that the 52 per cent. of "repairs" put on the road might, in a short time, be reduced to 25 per cent. For example, such items as \$115,000 for the repairs of freight cars, and of \$352,000 for the track ought not to happen. The first should be reduced to 10 per cent. of the amount, and the second to 50 per cent. This road shows the enormous amount of \$300,000 for the repairs of cars and engines! That this should be legitimate wear and tear, is incredible.

The net earnings, however, show a favorable result; for large as the expenses are, they are reduced \$300,000 on the previous, and thus with reduced receipts, the net earnings are really greater. They are large enough to show an increase of 5 per cent. on \$30,000,000, to which capital, the debts and stocks of the road should be reduced.

THE DRUGGIST.—We have before us the fourth number of a new and rather anomalous publication, of the above title. It seems to us to be a most excellent publication, for the profession, to which it is addressed. It is published by C. S. Williams, and edited by Henry E. Foote, M. D. Both departments seem to us well filled. A very good Market Review is got up, by Mr. E. P. Jones.

WILMINGTON AND ZANESVILLE RAILROAD.—This road is jogging on in the hands of a Receiver (Col. Bond,) who makes a monthly return to the Circuit Court. What has become of the scheme to make the Glendale Extension? So much has been said about it, that something ought to be done, or the whole plan abandoned.

THE CENTRAL TRANSIT.

MAGNIFICENT ENTERPRISE FOR TEXAS AND MEXICO.

(CONCLUDED.)

(From DeBow's Review.)

The facilities for building and working this road also compare favorably with those of the routes north of it. The smooth profile indicates little grading; on most of the route little more than ditching will be required. There are no frosts to oblige the use of ballasting. On the eastern slope, mesquite timber, a very durable wood, is found in quantity and size for cross-ties, and for short piles, which may be used instead of culverts. The lumber for the bridge across Rio Grande can be taken by steamboat up that river. Where other bridges may be needed, too large to be built of mesquite timber, stone of excellent quality, easily wrought, may be conveniently had. On the table-lands hard pine may be used for cross-ties, and on the western slope the redwood is abundant. The transportation of the iron would present the greatest difficulty. That for the eastern part may be imported through Aransas Bay, and as much as may be desired may be sent around the horn to Mazatlan. If great despatch were required, a part might be sent up the Rio Grande and distributed each way. With money at command, the time necessary to build the whole road, of six hundred and fifty miles, from tide to tide, with greatest economy, counting interest at six per cent. per annum, would not exceed five years. Any amount of Mexican labor may be had at very low rates; and these docile people do excellent work under proper guidance. The Mexican company have the privilege of introducing iron and all other materials for building and working the road, and all necessary agents and laborers, free of duty or impost forever.

In view of the foregoing facts, well authenticated by reference to approved maps, by personal inspection, and by reliable information, the cost of building a single track, with proper sidings, from Corpus Christi to Mazatlan, can not be estimated at over twenty thousand dollars per mile, including a sufficiency of rolling stock to do a paying business. This gives the cost, from tide to tide, at thirteen millions of dollars; and it may be safely assumed that fifteen millions will suffice to put the whole line in operation, from the harbor of Aransas Bay to that at Mazatlan, including interest. But detailed estimates, based on special instrumental surveys, are needed. These surveys should be made by men of known ability, uninfluenced by the interests of existing companies, or by local prejudices. It would seem eminently proper that the government of the United States should have this survey made as the complement of those elaborate and valuable Pacific railroad surveys heretofore made under the direction of the Secretary of War. It is well understood that the authorities of Mexico would cordially co-operate in such a work.

Objection may be made to the investment of capital in that part of the road within Mexico, on account of the instability of government there. The immense advantages to that country of such a thoroughfare, would incline enlightened rulers to give it all possible protection; and it is known that the liberal policy of Governor Vidaurri especially favors it. A company undertaking such an enterprise would carry with it much moral power, and its employes would necessarily be numerous enough

to give efficient security against all minor interruptions. But, if need be, the rights and property of such company may well be placed, by treaty stipulations, under the protection of our Government, or that of Great Britain.

Would this work pay good dividends to stockholders? This is the controlling question with private capitalists, although government may favor it on other grounds. A railroad cheaply built, if well built, may generally be cheaply maintained. Cuts, embankments, bridges, ties, &c., usually require repairs nearly proportioned to their cost. As the original outlay on this road will be small, so will be that for current repairs. But there are some peculiarities of this route tending greatly to diminish current expenses. The profile and alignment are remarkably favorable. The grading will be light. There will be an unusually small portion of bridging, and few, if any, draws. Most of the timber used will be exceedingly durable, the mesquite lasting for centuries. The climate is equable, dry, and temperate, thus avoiding the destructive effects of frequent expansions and contractions, the decay of rolling stock, the obstructions of snow and frost, and the use of ballast. Labor is abundant and cheap; and, owing to the mild climate and open country, cartage of materials is inexpensive. Wood, of excellent quality for fuel, is easily accessible along the route; and on the Rio Grande are found immense beds of bituminous coal, unexcelled for making steam, and easily brought to the road, which may traverse the beds. The lands are generally fertile, especially when irrigated; and food is now, and probably will ever continue, cheap. Supplies from abroad may be imported at Aransas Bay as cheaply as at any point on the Gulf of Mexico, and at Mazatlan as cheaply as at any point on the Pacific coast. From these facts it is evident that the current repairs and working expenses will be unusually light.

Would this road command custom sufficient to make it profitable? To answer this question a brief review of its connections may be useful. A glance at the map will show the position of this transit to be very peculiar. It is the furthest north that a short transit can possibly be had. It is the furthest south that admits of a connection by land with our present railroad and telegraphic systems east of the Rocky Mountains. The deep indentations of the Gulfs of Mexico and California, make practicable this short transit within the north zone. As before indicated, the trade of the whole Pacific ocean (the west coast of Central and South America alone, perhaps, excepted,) from New Zealand around by China and California, may be more easily concentrated at Mazatlan than at any other point on the western coast of America. Mails, travelers, and merchandise, from the Pacific, arrived at Corpus Christi, may pass through the Gulf of Mexico to any point in the Atlantic, or, keeping around the Gulf by railroad, may take the diversified routes to the north and east. The distinguishing feature of this route is the option it presents of cheap movement by water, or quick movement by railroad. The Gulf stream, flowing from continent to continent, and sweeping along the coast of Texas, close by the mouth of Aransas Bay, at once indicates and facilitates direct trade between the eastern terminus of this transit and Europe, as well as with our own Atlantic ports. But if time be an object, then the railroads leading to and from this main trunk may be used. A passenger from our northwest coast, or from Honolulu, might leave a steamship at Mazatlan, and by this route take a packet for Eu-

rope from New York, two weeks in advance of the arrival of another passenger by the same steamer via Panama.

The local trade would, probably, from the beginning, be sufficient to maintain the road, and would eventually become very great. It bisects the territory of the Mexican republic, and lays open the richest of its mining regions. Most of the States of Mexico may approach it by open navigation. The city of Mexico may reach it near the western terminus by way of the valley of the Rio Grande de Santiago, or at Saltillo by San Luis Potosi. All the northern States of Mexico approach it by good common roads, while the trade of almost the whole of the lower Rio Grande will naturally be drawn to it. The trade of the country tributary to this road has been immense, and still is great. The building of this road would give it a wonderful development. Its resources are not excelled by those of any part of the world as yet known. Political, social, and religious causes have combined with physical difficulties to retard their exploitation. This work would meliorate all these evils; and this fine country, naturally so rich, now so impoverished, would pour its treasures of gold, silver, copper, lead, grain, wool, and live stock, into the ports of the transit, and take, in return, the manufactures of Europe and of the United States. Passing eastward, along the central line heretofore described as running through so many commercial cities, we observe that all the rivers and roads running from the slopes of the Rocky Mountains, and from near the northern lakes toward the Gulf of Mexico, naturally lead into this thoroughfare on the left, while the railroads from our Atlantic ports westward lead into it from the right, each contributing its portion to swell the general march of men, mails and merchandise, across "the Central Transit," as it has been not inaptly called.

In view of such connections and such superiority of dispatch over all other possible routes, it would seem little worth to present details of calculations. It is evident that there would be no lack of custom. But as it may be more satisfactory to some minds, a few sources of business may be named. Mexico requires immense quantities of common salt, not only for stock, but especially for metallurgic purposes. Aransas Bay and its appendages can supply Mexico (and the rest of the world, if need be,) with this article at a cost almost nominal. Good lumber is scarce in Mexico. Florida may supply, by this road, any quantity desired. Coal is wanted in Mexico, in Texas, and on the Gulf. The Rio Grande coal-fields can furnish supplies for all who need, and this road will distribute it as wanted. These three sources alone are sufficient to give profitable employment to the road, without reference to the more profitable through business, which would be greatly augmented by the diminution of time and expense thus effected. The facts already stated show that this route would command most of the mail, passenger, and specie freight, between the two oceans, beside much merchandise requiring dispatch or liable to injury from effects of heat and moisture in more southern climes. The difference in risk, and consequently in expense of insurance, would be much in favor of this transit.

Passengers may be carried by this route from New Orleans to San Francisco for ninety-one dollars each, allowing five cents per mile for railroad, and three and a half cents for steamship transportation. This calculation presupposes that steamships are used from Berwick's Bay, or from New Orleans to Aransas Bay. But one hundred dollars would

be a fair charge from New Orleans to San Francisco, supposing the railroad to be used from New Orleans to Mazatlan. The passengers between the Atlantic and Pacific are now not less than fifty thousand per annum. The number is rapidly increasing, and the cheapness and security of this route would tend greatly to a still larger increase. We may well suppose that it would command, in a short time, at least one hundred thousand passengers per annum. The annual products of California and Australia, in gold, are each not less than fifty millions of dollars, and this production is likely to increase. That of Mexico is now large, and would be greatly multiplied by the effects of this road. It may be safely assumed that this transit would draw to it at least seventy-five millions dollars per annum, upon which a charge of a half of one per cent. would be reasonable. As this will be by several days the most expeditious route for most mails to and from the Pacific, the company might make its own terms for their transportation; but it will certainly be safe to count on the rate usually allowed on railroads within the United States. This is three hundred dollars per mile per annum; and as there will be much foreign and Mexican mail matter, the two together may be counted as paying as much as that of the United States alone. One hundred thousand passengers, at five cents per mile, six hundred and seventy miles, at six hundred dollars, give \$402,000. Specie, \$75,000,000, at half of one per cent., gives \$375,000. Gross receipts on three items only, \$4,127,000. If half be allowed for current expenses, we shall have a net income, from these three items alone, of nearly fourteen per cent. per annum on the whole cost of road and equipments complete. If to this be added the profits of the other through business, and of the way business, the aggregate would swell to a rate far beyond what is usually expected from ordinary railroads. As the Mexican company has the monopoly of this transit for ninety-nine years, and its possession perpetually, there would seem to be no danger of injurious competition. In reviewing the estimates presented, it should be especially considered that the climate is such as to preclude the necessity of high pay to agents and laborers; that native labor is abundant at four to five dollars per month per man; that materials are convenient and durable; and that food is cheap and abundant.

From the following statement, it appears that "The Central Transit" possesses many intrinsic and peculiar advantages. Relatively to others it is, in some respects, so superior, as not to admit of rivalry. It is plain that this is the only route by which private capital can carry our railroad and telegraphic system to the Pacific. The only serious difficulty that seems to impede its progress is the fact that it runs through Mexican territory, where government is unstable; but this difficulty is more imaginary than real. That part of the country through which this road will run is seldom disturbed by the revolutions in the capital; and as such a work would naturally be favored by the local authorities, any party in power would give aid rather than trouble. Besides, it is but the continuation of our own system into our feeble neighbor's country, and with it will go such a train of emigrants from Europe and the United States, as to set at defiance the ebullitions of local antipathies, and suffice to keep in strict subjection the few unquiet spirits that might be disposed to disturb its operations. In truth, the road may be built through Mexico at less cost than similar

work could be done within the United States, owing mainly to the cheapness of labor; and it is understood that parties are ready to take the contracts whenever the requisite means may be presented. Yet, if capitalists should require other guaranty of security for their investments, it would seem to be a simple matter to obtain it through the government of the United States, since the recent announcement of its policy in such matters, through the able and statesmanlike letter of Mr. Secretary Cass to our minister to Nicaragua. But should our government, through tenderness for a weak neighbor, hesitate to give due protection to its citizens engaged in this work, the British government would not fail to see that the interest of British capitalists, who may invest in it, shall not be wantonly or faithlessly sacrificed.

Let the facts, as herein set forth, be once established, as might be promptly and easily done by a survey under the direction of the Secretary of War, with the assent of Mexico, and capital will soon be found for the execution of the project. By the established policy of Texas, sixteen square miles of the public domain is given as a bonus for the construction of each mile of railroad within that State. This gratuity will doubtless be extended to this road, as to all others. This land alone may be made to repay the cost of that part east of the Rio Grande. But the Aransas Road Company, which holds the charter from Aransas Bay, via Corpus Christi, to the Rio Grande, has powers which would enable capital acting through it, to control the ownership of any lands between the Gulf and the Rio Grande, including the termini, which are optional with that company. From a combination of causes, these lands, though fertile and well adapted to grazing and cultivation, have heretofore been held at rates ranging from ten cents to two dollars per acre, according to locality. But these causes have mainly ceased to operate, or will soon be removed, and without this road these lands will soon rise in marketable value; but with it they would rival the astounding results realized in the new States of the northwest. An amount of capital, very small in comparison with the total cost of the work, judiciously invested in these lands, would form a basis of loans sufficient to build the road, and, when sold, probably leave a surplus, without trenching upon the bonus of the State. The skillful and faithful use of a small capital, then, may give the stockholders a railroad from Aransas Bay to the Rio Grande, about one hundred and fifty-five miles, *not only free of cost*, but even with a bonus beyond its cost, while the road itself would pay well for its working should it perchance never cross that river. The immense trade and travel that would be drawn from Mexico to its terminus on the Rio Grande, together with the salt, lumber, and coal business, would give ample profits, were the progress of the grand transit arrested at that national boundary.

But the railway will not be arrested at the border of Mexico. It is probable that grants of lands, as valuable as those in Texas, may be obtained from the States of the republic of Mexico, in which the route lies. It is certain that many large proprietors will gladly make donations of large tracts of lands conditioned upon the building of the road. Capital might also be employed, as in Texas, in purchasing lands at low prices before the location of the road. Extensive and intrinsically valuable estates along the route, are on sale at very low rates, owing to their remoteness from market, and to the unsettled condition of public affairs. The building of the road will remedy both these evils. Lands for cultivation

alone will be greatly enhanced in price. But many of these lands contain rich metallic veins, whose almost inappreciable value will be developed by the road. Such are the natural resources of this genial and fertile, but now misused country, that capital, well applied, may produce results far beyond those ordinarily realized. Much of this capital might be obtained from residents of the country.—The wealth of that people has been accumulated in the hands of a few families, who have concealed it at home or invested it abroad.—Could this work gain their confidence, it would command the use of a large portion of their hoarded wealth.

Fifteen millions of dollars has been named as the sum that might be expended in the completion of this transit. With means at command, a skillful manager would be able to have the cars run through from ocean to ocean by the use of a capital paid up, probably not exceeding three millions, and it would be bad management that would require from stockholders as much as five millions of dollars.—So small a sum would soon be provided for such a purpose if capitalists were satisfied that the facts are as here given. It is hoped that a full and complete survey, by our government, will soon give the requisite assurance.

[From the National Intelligencer.]

STEAM BOILER EXPLOSIONS.

Jacob Harshman, of Dayton, Ohio, claims to have discovered a reliable preventive of steam boiler explosions, which will also save from 25 to 40 per cent. of fuel in the generation of steam, and far more effectively than any other known device, allay the excessive heat of steam rooms in hot weather, and prevent the deleterious effect upon the atmosphere produced by heated iron.

A claim so broad and so important, if well founded, to great industrial interests, put forth by an honest and sane man, as Mr. Harshman is believed to be, deserves attention and investigation, though it comes in the questionable shape of a patent-right.

His discovery, or improvement, consists in the application of sheet copper around the outer surface of the boiler and fire-box, (where the fire is inside,) and around the iron pipe, cylinders, &c., through or into which, the steam passes, in performing its office, with an air space of from one-quarter to one-half inch between the iron and the copper casing surrounding it.

That this combination or arrangement of these two metals will prevent explosions of steam boilers, rests, mainly, on a series of experiments conducted by Mr. Harshman alone. He asserts that he produced violent explosions of boilers when experimenting without the copper casing; and that, under like circumstances in all other respects, with copper casing applied, in more than forty experiments, no explosion occurred, though in each instance the steam pressure was increased until the boilers were ruptured and the steam escaped. These results entirely satisfied Mr. Harshman that, with the copper casing thus applied, a steam boiler can not be exploded. He rejects the idea, so commonly prevalent, that explosions of boilers are caused by simple steam pressure, gradually or rapidly developed within the boiler. His reasons for so doing can not be properly presented in the limits of this article. They are, I think, most satisfactory and conclusive.

Mr. Harshman claims that, under certain conditions and circumstances, explosive elements are generated within a boiler, which,

when they explode, produce, like all highly explosive compounds, fulminating percussion. That such is the mode of acting, or law of the force or forces causing explosions, is shown by the effects produced—the tearing of the iron in all directions, and twisting and rolling it up like scorched leather; the shattering of the woodwork of vessels as though riven by lightning and various other effects. Steam, which presses in all directions, and obeys a simple law of expansion, can not act in this way nor produce such effects.

Mr. Harshman puts forth a theory by which he attempts to account for all the effects claimed for his invention. He assumes that there exists in nature "an ethereal element of the highest mobility, which permeates and penetrates all simple substances and occupies all space, even the perfect vacuum of the barometer. That it is a cold, *positive* element; is the base of all heat, combustion and respiration, and, when chemically compressed, evolves heat and light; that heat or caloric is a cold, *negative* element; that water is a negative to both these elements. Water being chemically sympathetic to caloric, and caloric being chemically sympathetic to ether it will absorb ether. As the fire is urged the water in the boiler absorbs the caloric, and the result *would* be one hundred per cent. of steam, from a certain amount of caloric absorbed, but for the ethereal element around the shell of the boiler, permeating and combining with the caloric, chemically changing it, latent 25 to 50 per cent. Thus the tendency is for the water to become surcharged with these two elements—ether and latent heat—and when so charged an explosion results; upon the same principle that an explosion occurs in the rain cloud, when it is positively charged with electricity—*latent heat*.

All that is necessary to protect a steam boiler from explosion is to place proper conditions of polarity between these elements—which is done by casing the iron boiler all over, except where the fire is externally applied to it, with sheet copper, with an air space between the outer shell of the boiler and the copper casing.

The combination of these two specific metals, with the air space, does, by laws of chemical polar affinity, serve important purposes.—The copper casing, in this arrangement, is *positive* to the iron boiler, and, being in contact with the ethereal element without, forms a repelling pole. The iron boiler is *negative*, and, being in contact with the internal elements, constitutes an absorbing pole; and thus prevents the combination of the explosive elements, whereby the latent heat, instead of being stored up in the water, and becoming dangerous as well as useless, is steadily and gradually developed and rendered sensible and useless.

Unlearned as I am, I shall not assert that Mr. Harshman's theory is true or false. It is probably a mixture of truth and error. Although he sets it forth somewhat positively, I do not understand that he claims to know that it is philosophically true. It is mainly speculative. That explosions of boilers are not caused by simple steam pressure, I am entirely convinced. That they are caused by explosive elements generated in the boiler, under certain circumstances, seems to me highly probable. That there is a striking similarity between the agent which produces explosions of boilers, and the electric fluid in the subtle and mighty force excited, the mode of action, and the effects produced, will hardly be questioned by those who have considered and compared them. And that the explosive element, or elements, in a boiler, may be set free

by the contraction of polar conditions, as in the explosion of the rain-cloud, as supposed by Mr. Harshman, may be more than a wild conjecture.

But aside from all theorizing—though the producing agent and its mode of action be inscrutable and unknown—Mr. Harshman has good right to claim, as the result of his experiments, that his invention will prevent explosions of boilers; and no one, learned or unlearned, is warranted in asserting to the contrary until he has tested the matter by proper experiments, as Mr. Harshman has done, and obtained different results.

That this invention will save a large per cent. of fuel (more than twenty per cent.) in the generation of steam, and most effectually allay the excessive heat, and improve the deleterious atmosphere of steam rooms, are well attested and indisputable facts, which, if any doubt, they may be satisfied of it by a visit to the Niles' Works, on Front street, near the Miami Canal, in this city, where the boiler is cased with sheet copper, according to Harshman's patent. Whether these results are attained simply by preventing radiation, or are produced by chemical or polar action of the two metals thus combined, I can not determine.

Mr. Harshman does not claim that they result from diminished radiation. In fact, he disclaims this idea, as the result of repeated experiments, that if a common stove, used for heating a room, be cased with sheet copper, according to his plan, it will produce the same temperature in the room, with full one-third less fuel than it will without the copper casing; that the heat will be equally distributed in all parts of the room, and the atmosphere kept healthful and invigorating. He says it is not what is given out by radiation from heated iron that vitiates the atmosphere of rooms, but what is absorbed or taken in; that the vital principle of the atmosphere—the etherial element, above alluded to—passes in through the iron, and leaves the gases of the air which will not penetrate iron, without, in an abnormal condition, partially unfitted to sustain life. In short, he claims that the principle by which his invention prevents explosions of boilers, saves fuel, allays the oppressive heat around the heated iron, and keeps the atmosphere from becoming vitiated, is the same. The polar conditions produced by the combination of the two metals repel the etherial element, and prevent it being unduly abstracted from the surrounding atmosphere; and a portion of the heat, which, but for the copper casing and the polar effects thus produced, would be rendered latent and useless, is gradually and efficiently developed.

After some considerable observation and investigation, I am well satisfied that Mr. Harshman's claims for his invention or discovery deserve to be honestly examined, and his invention practically and fairly tested. M.

CINCINNATI, August 3.

NEW JERSEY.—This is one of the few States in which there are any new enterprises in the shape of Railroad construction. A railroad has been built from Jersey city to Piermont, twenty five miles, through the valley of the Hackensack, etc., on a line about one and a half miles from the Hudson. This road was commenced and finished and put in working order, without recourse to borrowed money. It has opened a country of 150 square miles, which promises to be a new feeder to New York, the whole being accessible within an hour's ride. Easy access and low taxes will secure a dense population within a few years.—*New York Courier.*

WILLIAMSPORT AND ELMIRA R. R. COMPANY.

The managers of the Williamsport and Elmira Railroad Company have prepared a statement of the finances of the Company, and with it submit to the stock and bondholders a proposition which they profess to regard as calculated to relieve the Company from present embarrassment, and protect the interests of all concerned. They ascribe the difficulties under which they are laboring, to the depression in trade, which has materially reduced their receipts, during the past two years, and also to the financial contraction of the last few months, which has affected to a large extent all railroad corporations, and loans on their securities. The receipts of the road for 1856-7 were \$157,458; for 1857-8, \$120,067, and for 1858-9, but \$96,308, thus showing a remarkable prostration of trade, but especially of the local coal and iron business of the road. The floating debt of the Company is set down at \$280,201 48, from which, however, is to be deducted \$33,000 of collaterals, deliverable when released, thus making the debt \$247,201 48, in addition to \$32,363 42 due July 1, 1859, on the first mortgage coupons, and \$16,000 due April 1, 1859, on the second mortgage coupons, making the total present liabilities of the Company \$328,564 90. In this emergency they propose to the stock and bondholders to issue one million dollars of second mortgage bonds, bearing six per cent. interest. They anticipate, the present year, a net revenue of ninety-five thousand dollars, and one hundred and ten thousand the year following, after which it is believed that with the revival of trade over the country, and the growth of business from the completion of connecting roads, the net income of the third year may safely be estimated at one hundred and thirty thousand dollars, which amount is equal to the interest (\$70,000) on the present first seven per cent mortgage of \$1,000,000, and the preferred second, six per cent. mortgage (\$60,000). In their own language, the proposition of the managers is as follows, and they seem to regard it, desperate as it appears, as the only mode to save the road from foreclosure:

We propose to ask the first mortgage bondholders to fund their coupons for two years, say including January, 1861—and that they should receive for the same, six per cent. bonds of the Company, secured as follows, on which interest should be paid semi-annually as due, commencing with January 1st, 1861—so far as due. This, with the scrip already received for 1858 coupons, would amount to two hundred thousand dollars, and the new mortgage to be drawn would be first secured.....	\$300,000
That the chattel bondholders should receive in six per cent. bonds secured under above mortgage, on the real estate, and under a first mortgage on the chattels, as at present, seventy per cent. of their bonds, now five hundred thousand dollars, bearing interest from April, 1851, interest and balance of principal in a preferred stock.....	350,000
That the second, now seven hundred thousand dollars, should take six per cent. bonds for fifty per cent., to be issued under above mortgage, bearing interest from April 1st, 1861, payable semi-annually—interest and balance of principal in preferred stock.....	350,000
That the net income of the road for two years, be applied to the extinguishment of the floating indebtedness of the company, which, with the collaterals released, and the remaining one hundred thousand dollars of the million bonds now proposed, to be issued, would, it is estimated, entirely discharge this floating debt; any deficiency, however, to be liquidated proportionally in a preferred stock.....	100,000
	\$1,000,000

This would make, in addition to the present first mortgage, a second mortgage of one million dollars bearing interest at six per cent., and we believe the road will earn, two years hence, \$130,000 a year, or the interest on both mortgages.

The liabilities of the company will then consist of:

First Mortgage, as at present.....	\$1,000,000
Second Mortgage, as proposed.....	1,000,000
Preferred Stock, estimated.....	850,000
Common stock now \$1,500,000 to be reduced one-third.....	1,000,000
	\$3,850,000

It will thus be seen that the total capital of the road, fully equipped, would be less than \$50,000 per mile; of which about \$25,000 per mile would be represented in mortgage debt, and the remainder in stock. So soon as the reviving business of the country should enable the road to pay more than the interest on its indebtedness, the preferred stockholders would realize it. And the value of common stock of the Company would, as reconstructed, under the above arrangement, undoubtedly be greater than it can possibly be, while encumbered with so great a load of floating debt as has always rested over it.

THE RAILROADS—THEIR MANAGEMENT—WHAT SHOULD THE STOCKHOLDERS DO?

From one end of the country to the other, the cry comes up from railroad stockholders that their interests are being sacrificed, their investments made valueless by the mismanagement of those who have been intrusted with the direction of the affairs of the various companies. But do these same stockholders ever give a thought to the fact that they themselves are, in a measure, responsible for the loose and frequently corrupt manner in which the business affairs of the railroads have been administered? Not by any positive act of their own, it is true, but by the culpable neglect and inattention which mark their action after they have delegated certain powers to a Board of Directors and subsequently appointed officers.

The truth is, these stockholders are too careless of their own interests, until the roads in which they have invested their money become hopelessly bankrupt, and they find the bondholders waiting with open mouths for the falling of the suspended plum. When a Board of Directors is to be chosen, frequently one-half or three-fourths of the stock is represented by proxies, intrusted to the hands of men who have their own ends to accomplish, or favorites to reward. The Board thus chosen, in turn makes its choice of executive officers of the road, who, in too many instances, have not a dollar of pecuniary interest in the Company, beyond securing their own salaries, which are frequently enormous in comparison with the service rendered. Members of the Directory, too, are elected who have little pecuniary interest at stake, and hence exercise but little influence in the general management. For all this the stockholders are themselves responsible; and it is full time—if not already too late—to make an effort to remedy an evil which has grown to be a common ground of complaint every where.

To illustrate what we wish to impress upon those who complain of railroad mismanagement, we need only refer to a single road, of which we have a more intimate personal history, but which it is unnecessary for our purpose to name. The original cost of the road was about \$1,250,000, of which there was a stock issue of \$500,000. Of this amount the thirteen persons composing the Board of Directors do not own an aggregate of fifty thousand dollars, and probably one-half that sum would come nearer the actual amount. One of the Directors holds one share of \$25, and

yet has one-thirteenth of the control! The amount held by the President is \$4,000; by the Superintendent, \$300; by the Secretary, \$75, and by the Treasurer, not a penny! The President receives an annual salary of \$2,000; the Superintendent, \$1,800; the Treasurer, \$1,600; the Secretary, \$1,000. The four principal officers, under whose management the money received is expended, who conduct the affairs of the road to suit themselves, own \$4,575 in stock, and receive annual salaries amounting to \$6,400!

We do not wish to be understood to say that *because* these officers have so little pecuniary interest in the company, they would recklessly squander the funds, or prove recreant to their trust, but how much greater would be the security of the stockholders, and how much stronger the guarantee that the affairs of the road would be economically administered, if the executive officers, who receive and expend the funds, were more directly interested in the *profits and loss*. Presidents and superintendents of the roads disburse the funds as suits their own views, without consulting the stockholders, and generally caring little whether their action meets their concurrence or not, so long as the Board still continues the official connection at good round salaries.

But the remedy is with the stockholders themselves. Let them hold their officers, from highest to lowest, to a strict accountability, and require a frequent report of their doings. Let them select as Directors and Officers, men who have a *direct pecuniary interest* in the judicious management of the road—a bond for the faithful performance of their duties more potent than any other that can be required. It is quite time that the stockholders made a movement in the right direction, instead of quietly submitting to the misrule and ruin which characterizes the management of too many of the roads. Let them weep for their losses, but not until they have discharged their own obligations.

Seven out of every ten railroads through the country are gradually falling into the hands of the bondholders. The fact is not to be disguised, unpalatable as the truth may be to those who have invested their money in the stock securities. Let the creditors, then, be warned in time. Let them call a general mass-meeting, and take such action as will compel a change in the general management, and an economical administration of their affairs. The stockholders of Ohio have it in their power to change the present order of things if they but act with promptness and decision. Let them make themselves acquainted with the details of the operations of their officers, of the financial schemes of their officers, of the financial schemes of their Boards of Directors, and where an *expose* is not satisfactory, there should be a change in the board of officers. Displace the unworthy servants who have squandered the funds and are conducting the affairs of the companies to hopeless ruin. When the stockholders begin to act for themselves, the managers will be more cautious of their trust, and reforms, radical and immediate, will mark the course of affairs. A convention of the stockholders would accomplish more to inaugurate radical and desirable changes in the management of railroads, than a daily gathering of the representatives of all the roads in Ohio. It will cost nothing to try the experiment, and the saving of the millions of stock, held by the farmers and capitalists of Ohio, is at least worth the effort. What say the stockholders to the suggestion? Will they take measures to assemble together, and dis-

cuss these important questions, or will they continue to permit the grossest mismanagement, without an effort to check the reckless career of railroad Directors and Officers.—*Enquirer*.

[From the *Arizonian*.]

THE REDUCTION OF SILVER FROM ITS ORES.

To many of your readers engaged in mining operations, a few notes on the different methods employed to reduce silver from its ores may not be uninteresting, but these necessarily must be confined to the general principles of the metallurgy of silver only.

The reduction of some of the useful metals from their ores by fusion was well known by the ancients, reaching beyond the time when regular records were made in writing, and probably even beyond that period when this was invented. The reduction by the aid of quicksilver is, however, comparatively new, and if quicksilver was used at all, it was only employed for the extraction of virgin gold from its ores. Fusion also must have been an uncertain and mysterious operation, simply based on experiments or accidental discovery; and not as in our days on well established and proved principles of chemistry. The first successful application of mercury for the extraction of silver from its ores was made in the sixteenth century by Bartolome de Medina in Mexico, whence it was transplanted by Fernandez Velasco to Peru. Attempts to introduce it into the mines of Europe failed, and only two hundred years afterward the subject was revived by Baron Bern, of Vienna. In the seventeenth century Alonzo Barba, an Andalus, while in South America, discovered a considerably modified process, by which the ores were treated in a copper kettle, from whence it received the name of Caze (a kettle) amalgamation. Baron Bern's experiments were based on this discovery. His modified plan was partially successful, but still the process was imperfect. This partial success, however, caused intelligent miners to investigate the matter further, and resulted finally in the erection of the greatest, and even now most perfect, amalgamation works at Halsbucken, near Freyburg, in Saxony, from which it was universally called the Freyburg amalgamation. After great alteration barrels were substituted for kettles, and in place of agitation, these were so arranged as to revolve on an axle. By far the greatest mass of silver is extracted by either of the foregoing processes of amalgamation. It must, however, not be supposed that they can be indiscriminately applied; on the contrary, comparison of ores, climate, and locality and material have to determine which is the most proper method to make mining pay. In most instances the Freyburg or barrel process will succeed where others fail, provided this is under the surveillance of a good, practical chemist.

During the last fifteen years a new process to extract the silver, without the use of quicksilver, has been introduced by Mr. Augustin, a metallurgist from the Mansfield mines in Germany, which for products of the furnace and certain classes of ores, promises complete success, and an abolishment of all amalgamation: it is called Augustin's process of extracting silver.

Another new process has lately been introduced by a Mr. Ziervogel, from the same locality. We find then in use:

- 1st. The Furnace.
- 2d. The Mexican or patio amalgamation.

3d. The Caze (or kettle) amalgamation.

4th. The Freyburg or barrel do.

5th. Augustin's method by salt, without mercury.

6th. Ziervogel's method, without salt or mercury.

NO. 1.—FURNACE.

Ores are generally turned over to the furnace when they contain considerable quantities of lead, copper, and some other metal; also when fuel is very cheap and abundant; when a rigorous climate prevents chemical action in the patio, and for some other reasons. The ores are then smelted for the predominating metal. If this be lead, a simple refining after fusion will oxidize the lead, forming litharge, and leave the silver nearly pure on the herd of the refining furnace. If copper predominates, the ore is generally roasted and passed once or twice through the furnace, to separate from the metal the accompanying rock of the vein, and to expel most of the volatile metals. The resulting metallic product is then smelted together, with certain proportions of lead. This mixture is run into cakes, which are then subjected to a species of sweating process under a moderate fire, which causes the greatest quantity of the lead in combination with the silver to ooze out of the cakes, leaving these honey-combed skeletons behind, consisting of the original materials, (deprived of its silver) with some lead. The silver lead is then refined in the same way as that obtained from the furnace from lead ores. The process of separation has been superseded in most large establishments of the barrel amalgamation.

NO. 2.—MEXICAN OR PATIO AMALGAMATION.

No material alteration has been made since its discovery in the sixteenth century, and it is most remarkable that such a complicated process could have been so far perfected in those times without the aid of chemistry. This process is principally used in the Spanish American countries, and excellently adapted for them, their climate and their sterile plains and barren mountains, their want of fuel and difficult access for transportation of heavy machinery. By far the greatest portion of the silver is reduced by this process. The process is as follows:

The ore is first freed from any valueless rock, then they are separated and sorted, thence crushed, and finally ground to an impalpable powder, in the rude but well known arrastras, or horse mills. This powder is transferred to the "Patio," a floor closely paved with rocks. It is there spread over circular surfaces of different sizes, and but eight inches or one foot thick. Here they are mixed with from two to five per cent. of salt, first with shovels, and afterwards by treading it well with horses, mules or oxen. Next day this is removed for half an hour, and then one-half or one per cent. of maxizstral (copper pyrites,) is added, after which mixing is continued. These additions are called "incorporation." After this, mercury is sprinkled over by being poured through a canvas bag, after which the whole mass is again well trodden by animals. Their treading is resumed every other day, until a trial is made in a horn spoon, by washing of the mixture, shows that all the quicksilver has been taken up by the silver. It requires generally two more additions of mercury, and the necessary mixing of the ores before the silver is all converted into amalgam. This process requires careful watching, and a skilful experienced operator. Maxizstral has the property of heating the mass; if used in excess, this will be too hot (as it is called,) if not enough, the mass will be "cold." The consequence

of the mass being too hot, will be a loss of quicksilver, by conversion into chloride, or calomel. If too cold, the chemical action upon the whole process ceases more or less. This last is remedied by adding more mazistral, the former state by adding small quantities of lime. Simple as this may seem, it is not so in practice, and requires a great deal of experience. The quantity of quicksilver used for the ores depend upon their richness. In some parts of Mexico, if the ton of ore averages three pounds of silver, about thirty pounds of quicksilver is used, of which four pounds or more are invariably lost. When the amalgamation is completed, that is, when all the silver in the ground ore has entered into combination with the mercury, the mass is brought into large vats, where, by a process of washing, the earthy particles are floated off, while, owing to specific gravity, the silver and mercury remains behind. This residue is pressed through a canvas bag, which permit the passage of the liquid mercury, but not as that combined with the silver as amalgam, which remains behind in proportion of six to one per cent. of silver. This silver amalgam is subjected in an iron or earthen retort to a red heat for some time, which causes the mercury to evaporate, and in this gassy state it is conducted by iron pipes or other contrivance, into a vessel under water, where it condenses, assuming its original liquid form. The silver remains behind in a beautiful porous mass, called *Plata Pina* in Mexico, in which shape it is ready for market, or it is run into bars by simple fusion. The whole process, after taking the ground ore into the patio, lasts from twelve days to two and three months. This difference is caused by manipulation, composition of the ores, and the climate. Ores which will consume only twenty days in the summer to be reduced, may require two or three months in the winter. In order to make some ores available for this process, they have to undergo the process of roasting in a reverberating furnace.

NO. 3.—AMALGAMATION (DE CAZE,) IN KETTLES.

This mode of amalgamating silver ores was discovered in the seventeenth century by Alonso Barba in South America. It is as follows:

After the ore is finely ground in the arrastra, about 150 pounds of it is placed in a copper kettle, and the sides heightened by wooden staves. Salt is added, and the whole mixed with a wooden shovel, with a sufficiency of water to give it a pasty consistence. To this is then added from six to eight times the quantity of quicksilver as silver is supposed to be in the ore, as proved by assay. A slow fire is then lighted, and the mass stirred with the wooden shovel. From time to time trial assays are made in the horn spoon to see whether more quicksilver is required. This manipulation lasts from two to four hours, when the mass is emptied into the washing apparatus, where the earthy matter is washed off. The kettle is at once filled with new material. By this process less quicksilver is lost than by that of the patio, but the residue of the earthy matter contains much more silver. For this reason it is only used for very rich ores, and the residue is re-worked in the patio. Mazistral is used at times, but with little profit, owing to its injurious effects on the copper kettle.

NO. 4.—THE FREYBURG OR BARREL AMALGAMATOR.

This differs principally from the patio by the rapid reduction of the silver from its ores, and from its small loss of quicksilver. I have only room to give the general routine of this process; more would be out of place, and useless.

The ore, as in the patio, is first sorted, crushed, ground fine, and sifted. Then the ore is mixed with from five to ten per cent. of salt, and for four to five hours roasted in a large reverberating furnace; additions of other substances are needed at times. The object of roasting is to expel most of the volatile metals as sulphur, arsenic, antimony, etc., to convert others into oxides, and the silver into chloride, which takes place when the salt decomposes. This requires a careful watch. The ore requires continual stirring up, to expose constantly new surfaces to the action of the heat. Roasting may be deficient, or it may have been carried on to excess, in which case it is termed to be dead. Either state will cause the loss of silver and quicksilver, and moreover produce a very impure silver, other metals having gone in the amalgam of the operation next to be described. If this is the case, another operation of separating and refining is needed. After roasting, the ores are ready for the barrels, which are generally of a size to hold half a ton of ore, and nearly as much more of other matter. To this half a ton of ore, water is added, sufficient to produce a kind of paste. After some time some fifty pounds of mercury are added, regulated by the richness of the ores; also a small quantity of iron or copper. Whether copper or iron is to be used, can only be ascertained by a practical chemist, as it depends entirely on the composition of the ores. After this the barrels are slowly revolved around on iron axes for a space of eighteen or twenty hours, in which time all the silver is amalgamated with the mercury. This is now settled by a slower motion, then tapped, filtered and retorted, as in the usual mode by the patio process. The earthy mass is then run into the vat, where, by the aid of continued agitation and water, it is worked off, leaving any stray particles of silver amalgam and mercury behind. The whole operation, after the ore is roasted, occupies from twenty-two to twenty-four hours. The silver is more pure as that from the patio, and the loss of mercury is far less, being but three and a half ounces to eight ounces of silver produced.

The barrel process, to be successful; requires, however, in the very start, the outlay of large capital and powerful machinery; when these are wanting and other things are favorable, the patio is to be preferred. In these different methods of silver extraction, some silver is always lost. This loss is not permanent in the same mine, nor alike in different localities. No rule for estimating it can be given. But experience has proven it to be greatest in kettle amalgamation, next in the furnace, next in the patio, and last in the barrels.

NO. 5.—DISSOLVING OF ORES WITHOUT MERCURY.

This process of extracting silver from furnace products and from silver ores is comparatively new, having only come in use within the last fifteen years; but for certain classes of ores, it promises to supercede all the other methods hereafter. A great many of the Arizona ores seem to be particularly adapted for this process. Ores containing lead cannot be subjected to this process, but those of copper composition may be profitably treated by it. The process was discovered by the mining engineer, Augustin, in Germany, and has been named Augustin's silver extraction. The ores by this process are subjected to the same treatment as those used in the barrel amalgamation, until after roasting. But here, in place of rotation in barrels, it is drawn red hot from the furnace, and thus thrown into large wooden vats partially filled with a strong ley

of salt and water. Here it remains for some time, and the chloride of silver is taken up by the solution, which, after a while, is filtered, and the silver precipitated with cement copper; it is then washed, melted, and run into bars. The solid residue, if rich in copper, is then smelted, and any copper held in solution in the ley is precipitated, as cement copper with iron. But little more time is required for this process than for that of the barrels; little more wood is consumed; no quicksilver is used nor lost, and the use of powerful machinery is dispensed with. As an offset, however, more salt is used up, and the reputation of the whole process is not yet so well established as that of the Freyburg amalgamation. Immense establishments, however, are now in successful operation in Germany, having in some places been substituted for amalgamation. It would be ridiculous for any one but an experienced, practical chemist, to attempt a trial of it on a large scale.

SILVER EXTRACTION WITHOUT SALT OR MERCURY.

A new process called Ziervogels', has lately been introduced, where even salt is dispensed with; it only differs from the foregoing in the roasting. The silver in place of being converted into a chloride by the addition of salt, is changed into sulphate, in which state it is soluble in water. For products of the furnace it has been successful in the Mansfield mines, where Mr. Ziervogel, an engineer, is operating on a large scale; but for ores, no such result can yet be claimed in its favor; future experiments, however, may remove all difficulties. Should this be so, an immense revolution in the metallurgy of metals will take place, and no country will reap greater benefits from it than Arizona.

There is no doubt but that we are on the eve of great changes and discoveries in the reduction of the useful and the precious metals. The old clumsy horses, the uncertain and often unfathomable mysteries of the furnace, will have to make place for the exact chemical laboratory, and its new operations. Most of our present methods in use in metallurgy are certainly behind the present state of chemistry. H. E.

ARMSTRONG'S LONG RANGE.—The London *Athenæum* contains the following illustration of the precision of aim attained by the Armstrong gun:

"A few days ago we saw the range and accuracy of the new Armstrong gun tested in a way which demands a note. Cooling ourselves on the Essex coast, near the artillery practising ground, we were asked to see the firing, and while this goes slowly and solemnly on, one of them spies a flight of geese far out to sea. 'There, they light on yon sand-bank.' Up goes a dozen glasses. Yes; there they flicker in the sun, gray and white, mere specks in the blue sea air. Load the gun—load at the breech—poise—bang! Boat off there to the sands! A signal tells the tale. The shot has struck the swarm—a life is taken from the flight—and this at six miles seven furlongs from the mouth of the gun! A shot as well aimed from Primrose Hill should hit the ball on Greenwich Observatory, or if fired from Richmond Park, should bring down a rider in Rotten Row. Here is a fact worth the attention of those Austrian engineers who have just come to London to study our new artillery and learn how to defend Verona against the Frank."

RAILROAD INVESTMENT IN NEW YORK.—The recent annual report of the State Engineer of New York shows how reckless or unwise has been the railroad speculation in that State.—The stock, capital and debts of the railroads of that State amount to the sum of nearly one hundred and fifty millions of dollars, of which nearly eighty five millions is debt hanging over the property. Deducting the city railroads, and the total earnings of all the others amount to but a little more than the half of one per cent. per annum. Only eight railroads in operation have declared dividends, and most of the others have been running at an actual loss. About 63 per cent. is swallowed up in transportation expenses. The country, it is said, benefits every railroad improvement. Somebody certainly ought to, for it is very clear that the stockholders on a great many of them do not derive a single cent of profit. The evil of building railroads on credit is likely to cure itself very soon, if this is the legitimate fruit of it.

SHARP'S PATENT BREECH LOADING REPEATER.

Every accession to our manufacturing industry affords new cause for congratulation. For years past our city has maintained an envied progress in almost every branch of mechanical industry. No one can peruse such a work as Friedley on Philadelphia and its Manufactures without being convinced of this, as well as being gratified at the evidence accumulated in his pages of the unrivalled fame acquired by our mechanical and manufacturing establishments. The proximity of Philadelphia to the coal beds and iron factories, her healthy climate, and facilities for distributing manufactured products, in connection with her unequalled advantages for furnishing comfortable homes to operatives; among other things, recommend her as the most desirable point in the Union for prosecuting nearly every kind of manufacturing with the highest degree of success.

These inducements are having their effect upon the ingenious and enterprising. New establishments are constantly going into operation, and the inventors of new devices are selecting this city as the best focus for receiving the raw material used by them, and for distributing the article when finished. Among the last of such inventors, we are glad to welcome Mr. Sharp, the inventor and manufacturer of the Patent Breech Loading Repeating Pistol. It required some ingenuity, as well as boldness of conception, to rival Colt and Weston, or give the public a weapon superior in any particular to the famous instruments known by these names. This, however, has been accomplished by Sharp's new patent. In the room of making a lengthy description of this weapon, suffice it to say, that the sample now manufactured has four compact barrels, the chambers forming a square, which slide upon a fixed support extending from and being a part of the handle, so that they can be loaded in an instant at the breech by the copper cartridge. The barrels are then pushed back and held firmly by a spring catch in the support. The breech, with the copper heads of the four cartridges, are closely fitted by a permanent shield of iron pierced in the center through which the hammer strikes. Upon the hammer there is a revolving disk with a tit or point on its side. This tit strikes through the hole in the shield upon the head of one of the cartridges. In the act of cocking, this disk revolves, so as to make the tit strike another cartridge, and so on till all are exploded. In

this revolving hammer-disk consists the great merit of the invention. It is not liable to derangement, is durable and perfectly simple and effective in operation. The shield through which it strikes prevents any slivers or pieces of the caps or sparks from flying, and the discharge of any barrel but the one intended is impossible. There is no possibility of a misfire; nothing can interfere with the hammer or prevent the disk from revolving while the machinery is in good condition. The barrels and charges being stationary, they can be discharged with certainty and as rapidly as the hammer can be cocked and let fly. The sample now introduced is small, and conveniently "carried in the vest pocket." We do not advocate the carrying of concealed weapons, but did we dissuade people from so doing, the more we said the more they wouldn't mind us. So the best we can do, is to point out the most satisfactory little protectors now manufactured.—*Pennsylvanian*.

A GOOD STORY.—The Springfield *Democrat* tells the following good story: From the paucity of action evinced by the committee referred to, we hardly think it probable that the pharisaical prayer will be heard at present.—The story is told as follows:

"Among the committee sent here from New York to arrange for the transfer of the Chicago, Alton & St. Louis Railroad, was one very pious man, who had somehow obtained the idea that the western people were a set of heathens, not believing in and greatly needing the efficacy of prayer. One night he was overheard at his devotions at the Chenery House. He prayed for good crops, for rain, and for the speedy conversion of the inhabitants of the West, and wound up in the following strain: 'And now, turn the heart of that hardened sinner, Joel A. Matteson, and incline him, oh Lord, to give up the Chicago and Alton road into the hands of thy servant, and thine shall be the glory, &c.' We are assured that the above story is true in every particular."

RAILROADS IN THE U. STATES.

The "Capitalists' Guide and Railway Annual," by F. H. Stow, contains some interesting statistics concerning Railroads in the United States, from which the following is condensed:

It appears that in nine years, or from 1850 to 1859, the railroads of the United States increased from 7,355 to 27,944 miles in length. In this period the increase in the New England States amounted to 62.74 per cent, while in the eight of the Western States the increase was 1,301.41 per cent. At the same time the former gained in population 16 12 per cent., and the latter 46.22. The total cost of the roads, up to 1859, amounted to \$365,451,070, of which large sum it is supposed one-third has been wasted in construction; yet by their influence lands have been advanced in value and the speed of internal communication greatly augmented, and the whole country benefitted. There are at this time 28,000 miles of finished roads in the United States, and about 16,000 miles under construction or projected, requiring \$400,000,000 for their completion. It is estimated, however, that many years must elapse before sufficient capital can be diverted from other objects to carry them through. In the meantime, many projected in a spirit of rivalry to other roads will be abandoned. It is calculated that 20,000

miles of railroad are sufficient to do all the business of the country at the present time, and that 8,000 miles have been constructed, in part in rivalry to other roads, which have proved a dead loss to stockholders, and in the main will pass into the hands of the bondholders. The average cost of railroads per mile has been \$36,328. In the Middle States, \$40,919; in the Southern States, \$12,909, and in the Western States, \$36,333.

The reason assigned for the cheapness of construction of railroads at the South is, that they were built on the cash plan. Among the net earnings, the Panama shows the largest returns; being \$29,564 per mile; and those earning the least, or nothing to stockholders, were found in Maine, Vermont, Mississippi, Missouri, Iowa, Illinois, New York, etc. The list of dividend paying roads comprises 78; among which, two pay an annual dividend of 12 per cent.; nine, 10 per cent.; two, 9 per cent.; ten, 8 per cent.; six, 7 per cent.; thirty, 6 per cent.; five, 5 per cent.; one, 4 per cent.; one, 2½; and one, 2 per cent. The list of delinquent companies on stock or bonds amounts to 33. The total bonded debts of the American railroads, all of which mature between 1859 and 1874, amount to \$411,199,702. The total debts of the States, including all liabilities, direct and indirect, including loans to railroads and expenditures for canal and and banking purposes, amount, according to Mr. Stow's statement, to about \$291,895,660.

SOUTH-WESTERN RAILROAD.

The earnings of this road for the fiscal year ending July 31st, have been:

Earnings from freight.....	\$339,073
" " passengers.....	193,293
" " carriage of mails.....	15,510
Total.....	\$547,876

The current expenses were:

For Repairs of Road.....	\$43,137
For materials for same.....	14,514
For tools, subsistence, etc.....	19,308
For fuel for locomotives.....	6,555
For water do.....	3,365
For repairs of buildings.....	549
For repairs of locomotives.....	15,396
For wages of workmen and firemen.....	22,623
For oil and waste for locomotives.....	2,116
For repairs of cars.....	17,076
For oil and waste for same.....	925
For salaries, train expenses, etc.....	45,729
Paid for damages to goods, etc.....	2,674
Commissions to station agents.....	6,497
Incidental expenses.....	9,477

Total current expenses..... 210,107

Net earnings..... \$337,769

In addition, expenditures of a permanent character to the amount of \$55,538 were made for the following objects:

New buildings.....	\$3,780
New passenger cars.....	5,950
New freight cars.....	14,163
For locomotive engines.....	20,743
Construction tools, etc., etc.....	10,902

Total.....\$55,538

The total ordinary and extraordinary expenses were.....\$265,645

Leaving as net earnings..... 282,830

The stock of the Company 1st August, inst., as shown by the Treasurer's Balance Sheet, amounted to.....\$2,254,000

The stock earned, and to be earned by contractors, will amount to..... 246,000

At the completion, the stock will be.....\$2,500,000

The bonds of the company, as shown by the same Balance Sheet, on the 1st August, instant, amounted to.....\$631,000

The bonds earned and to be earned by contractors, will amount to..... 130,000

At the completion, the bonds will be.....\$761,000

MONETARY AND COMMERCIAL.

Collections, during the week past, have been more free, and the supply of capital more abundant. Hence discount houses have been more liberal in their loans, and there has been ease and freedom in the market. Good names are disappearing from the streets, and business is assuming its wonted tone.

The tendency of the market for Eastern Exchange is upward. The demand is fully equal to the supply. The rates of the leading houses are without change, but we hear of some sales at $\frac{1}{2}$.

Missouri currency is bought at 1 dis., and Illinois and Wisconsin at $\frac{1}{4}$ dis.

The N. Y. *Courier and Enquirer*, of Monday, remarks, The Money Market during the week has been of a healthy stringency, which, as much as anything else, aids in the conservative tendency much needed. The rates for first class paper have rather lowered, but for second class they are firm, and would be higher but for the limited supply.—Call loans have rates at 6 per cent., to 7 per cent. and first class short paper nearly the same.

Mr. Chas. Morn has resigned the Presidency of the Erie Railroad. The subject will come before the Board of Directors, who meet to-day to act upon the plan of re-organization submitted by their Committee.

The operations of buyers yesterday to retard the upward movement in stocks was unsuccessful, even for the time, and to-day the leading securities are higher than at any previous time for the past two months. The business of the Stock Board was chiefly confined to N. Y. Central and the Western Railroad Shares. State Stocks were dull.

The death of George Brown, the eminent banker of Baltimore, says the N. Y. *Courier*, deserves a passing notice in commercial circles. George Brown was the eldest son of Alexander Brown & Sons, who was the founder of the house of Alexander Brown & Sons, first engaged early in this country importing Irish linens. His sons were Geo. Brown, who has been for many years the head of the firm in Baltimore. James Brown, another son, is at the head of the New York branch, and William Brown, who has charge of the Liverpool branch. A fourth son is at the head of the Philadelphia firm. The business transacted for many years has been Mercantile Banking, similar to that by which Geo. Peabody, Baring Brothers, and other firms, have earned a world wide reputation. In credit and success, even among such names, the name of Brown Brothers has stood prominent both in this country and in Europe, and their business has been managed with the consummate skill and tact which alone enable a house to withstand the commercial changes of half a century.

Mr. George Brown was for many years after his father's death, the head of the firm of Alex. Brown & Sons, and subsequently of Brown Bros. He also filled, at different times, very important public places, among them that of President of the Baltimore and Ohio Railroad, and President of the Merchants' Bank.

STATEMENT OF THE WISCONSIN BANKS.—The report of the Controller of Wisconsin, giving the condition of the several banks of the State on the 30th ult., has appeared. The whole number of banks doing business on that day was 105; their aggregate capital, \$6,750,000. The report continues:

The total amount of countersigned circulating notes issued to such banks and outstanding on this day is.....\$4,397,165
The circulation of banks winding up is.....66,512

Aggregate circulation outstanding.....\$4,463,677

For the redemption of which securities have been assigned in trust to the State Treasurer amounting in the aggregate to.....\$870,760
Specie deposited by banks doing business.....31,868
Specie deposited by banks winding up.....66,515

Aggregate.....\$4,972,143

The aggregate securities held by the Controller are as follows:

California State Stock, 7 per cent.	\$74,610
Georgia " 6 "	32,500
Georgia " 7 "	20,000
Illinois " 6 "	578,220
Iowa " 7 "	10,000
Indiana " 5 "	65,000
Kentucky " 5 "	14,000
Kentucky " 6 "	11,200
Louisiana " 5 "	10,000
Louisiana " 6 "	207,500
Michigan " 6 "	69,500
Missouri " 6 "	1,976,000
N. Carolina " 6 "	200,000
Ohio " 6 "	229,000
Pennsylvania " 5 "	14,000
Tennessee " 6 "	659,000
Virginia " 5 "	191,040
Virginia " 6 "	193,000
Wisconsin " 6 "	100,000
M. & W'n R. R. Bds 8 "	50,000
Racine & Miss. Bonds 8 "	27,000

Total.....\$4,870,760
Specie, (including closed Banks).....101,383

Aggregate.....\$4,972,143

The following Banks are winding up:

Badger State Bank, Janesville; Bank of the City of La Crosse; Farmers' Bank, Hudson; Germania Bank, Milwaukee; Janesville City Bank, Janesville; Globe Bank, Milwaukee; Kankakee Bank, Black River Falls; Marathon County Bank, Eagle River; Merchants' Bank, Milwaukee; Northern Wisconsin Bank, Aurora; Oshkosh City Bank, Oshkosh; Peoples' Bank, Milwaukee; Producers' Bank, Janesville; State Security Bank, Gemenkon; Union Bank, Milwaukee; Wisconsin Bank, Mineral Point.

SUMMARY OF THE PERFORMANCE AND COST OF LOCOMOTIVE ENGINES ON THE BALTIMORE AND OHIO R. R., FOR JULY, 1859.

FIRST DIVISION.

Number of Passenger Engines.....	6
Average No. of miles run by each engine.....	2,688
Miles run to 1 cord wood, (lighting fires).....	1,093
" " 1 quart of oil.....	38.6
Pounds of coal consumed per mile run.....	19.7
Cost of repairs per mile run.....	5.8
" fuel " ".....	2.7
" stores " ".....	0.7
Total cost " ".....	9.2
Number of Tonnage Engines, (including switching engines).....	59
Average No. of miles run by each engine.....	1,317
Miles run to 1 cord wood, (lighting fires).....	640
" " 1 quart of oil.....	25.3
Pounds of coal consumed per mile run.....	48.8
Cost of repairs per mile run.....	7.7
" fuel " ".....	6.7
" stores " ".....	0.8
Total cost " ".....	15.2

WASHINGTON BRANCH.

Number of Passenger Engines.....	3
Average No. of miles run by each engine.....	2,320
Miles run to 1 cord wood, (lighting fires).....	568
" " 1 quart of oil.....	51.1
Pounds of coal consumed per mile run.....	27.6
Cost of repairs per mile run.....	5.2
" fuel " ".....	4.7
" stores " ".....	0.6
Total cost " ".....	10.5
Number of Tonnage Engines.....	2
Average No. of miles run by each engine.....	2,021
Miles run to 1 cord wood, (lighting fires).....	674
" " 1 quart of oil.....	25.6
Pounds of coal consumed per mile run.....	28.2
Cost of repairs per mile run.....	9.7
" fuel " ".....	4.5
" stores " ".....	0.9
Total cost " ".....	15.1

SECOND DIVISION.

Number of Passenger Engines.....	4
Average No. of miles run by each engine.....	3,034
Miles run to 1 cord wood, (lighting fires).....	933
" " 1 quart of oil.....	60.6
Pounds of coal consumed per mile run.....	20.3
Cost of repairs per mile run.....	3.4
" fuel " ".....	1.7
" stores " ".....	0.5
Total cost " ".....	5.6

There are also upon this division two Wood-burning

Passenger Engines:

Average No. of miles run by each engine.....	2,712
Cost of repairs per mile run.....	1.7
" fuel " ".....	6.7
Number of Tonnage Engines.....	36
Average No. of miles run by each engine.....	1,324
Miles run to 1 cord wood, (lighting fires).....	849
" " 1 quart of oil.....	30.0
Pounds of coal consumed per mile run.....	64.1
Cost of repairs per mile run.....	7.6
" fuel " ".....	5.1
" stores " ".....	0.8
Total cost " ".....	13.5

THIRD DIVISION.

Number of Passenger Engines, (10-wheel engines, weighing 60,000 lbs).....	4
Average No. of miles run by each engine.....	2,194
Miles run to 1 cord wood, (lighting fires).....	1,003
" " 1 quart of oil.....	28.3
Pounds coal and coke (about equal quantities of each) consumed per mile run.....	62.0
Cost of repairs per mile run.....	5.2
" fuel " ".....	5.9
" stores " ".....	0.8
Total cost " ".....	11.9
Number of Tonnage Engines.....	38
Average No. of miles run by each engine.....	723
Miles run to 1 cord wood, (lighting fires).....	1,194
" " 1 quart of oil.....	21.2
Pounds of coal consumed per mile run.....	88.9
Cost of repairs per mile run.....	11.3
" fuel " ".....	4.4
" stores " ".....	1.1
Total cost " ".....	16.8

FOURTH DIVISION.

Number of Passenger Engines.....	9
Average No. of miles run by each engine.....	2,174
Miles run to 1 cord wood, (lighting fires).....	523
" " 1 quart of oil.....	34.0
Pounds of coal consumed per mile run.....	23.0
Cost of repairs per mile run.....	8.8
" fuel " ".....	3.0
" stores " ".....	0.7
Total cost " ".....	12.5

There is also on this division one Wood-burning Passenger Engine:

No. of miles run by engine.....	3,216
Cost of repairs per mile run.....	2.0
" fuel " ".....	4.0
Number of Tonnage Engines.....	24
Average No. of miles run by each engine.....	820
Miles run to 1 cord wood, (lighting fires).....	543
" " 1 quart of oil.....	25.4
Pounds of coal consumed per mile run.....	52.3
Cost of repairs per mile run.....	7.7
" fuel " ".....	3.1
" stores " ".....	0.9
Total cost " ".....	11.7

PARKERSBURG BRANCH.

Number of Passenger Engines.....	2
Average No. of miles run by each engine.....	1,395
Miles run to 1 cord wood, (lighting fires).....	1,177
" " 1 quart of oil.....	30.0
Pounds of coal consumed per mile run.....	20.1
Cost of repairs per mile run.....	18.2
" fuel " ".....	1.2
" stores " ".....	0.9
Total cost " ".....	20.3
Number of Tonnage Engines.....	16
Average No. of miles run by each engine.....	624
Miles run to 1 cord wood, (lighting fires).....	536
" " 1 quart of oil.....	24.7
Pounds of coal consumed per mile run.....	54.3
Cost of repairs per mile run.....	17.5
" fuel " ".....	3.0
" stores " ".....	1.0
Total cost " ".....	21.5

NOTE.—Cost of repairs includes the cleaning of engines.

HENRY TYSON,
Master of Machinery.

BOSTON AND MAINE RAILROAD.

The report of this company for the fiscal year ending May 31, 1859, has been issued, from which we learn that the receipts during that time were:

From Passengers.....	\$465,181 09
" Freight.....	327,668 27
" Rents.....	7,076 09
" Mails.....	9,616 57
" Interest.....	9,139 20

Total.....\$818,681 22

The expenses were:

RUNNING EXPENSES.

Repairs of Road.....	\$69,963 20
" Bridges.....	18,334 00
" Fences, gates, etc.....	2,863 25
" Station buildings, fixtures and furniture.....	20,193 83
" Locomotives.....	28,440 34
" Cars of all kinds.....	19,057 97
Removing ice and snow.....	853 53
Switchmen, gatemen, etc.....	19,128 81
Passenger expenses.....	66,127 74
Freight do.....	56,545 11
Wood.....	48,905 43
Sawing wood and pumping water.....	14,187 69
Oil.....	6,305 55
Waste.....	1,569 39
Horse power.....	9,233 37
Damages and gratuities.....	7,368 79
Coal for locomotives.....	250 00

379,327 91

\$439,253 31

OTHER EXPENSES.

General Expenses, being salaries, law expenses, etc.....	\$17,387 27
Taxes, (estimated).....	11,833 27
Insurance.....	2,975 07
Rent of Danvers Railroad.....	7,500 00

39,695 61

Net, after deducting expenses.....	\$399,657 70
Charged for renewals of iron.....	\$21,845 47
Do for depreciation of locomotives and cars.....	7,590 00
	29,435 47
Net, after deducting expenses and depreciation and iron.....	\$370,222 23

IMPORTANT RAILROAD DECISIONS.

The Schoharie *Republican*, of Thursday, is informed that Judge Gould has rendered his decision in the case of the Albany and Susquehanna Railroad Company, at certain towns in Schoharie County. It will be remembered that suits were commenced last fall by citizens of the towns of Seward, Richmondville, Cobleskill, and Schoharie, respectively, against the Commissioners of each of the above named towns, and against the Supervisors of Schoharie County, to restrain the issuing of bonds by said towns, or the raising of moneys by the Board of Supervisors, to pay interest on bonds to be issued by said Commissioners, for the purpose of aiding in the construction of the Albany and Susquehanna Railroad.

An injunction was granted by Judge Gould, during the sitting of the last Schoharie Circuit, in Schoharie County, which was subsequently dissolved by Judge Gould himself, upon a motion made for that purpose by the railroad company.

Among other questions raised by the pleadings in these several suits, it was claimed by the plaintiffs that "the consent of a majority of the tax-payers, representing a majority of the taxable property" in the several towns, had not been obtained, and the bonds of the several towns could not therefore be issued in aid of the company.

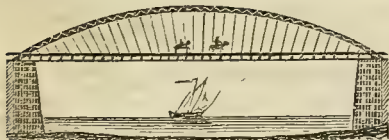
The causes were noticed for trial at the Schoharie Circuit, but could not be reached upon the calendar, and they were accordingly referred, by consent of the parties, to Judge Gould, to hear and decide the same.

The causes were argued at Sharon Springs during the latter part of July last, and the *Republican* now learns, from a private source, that Judge Gould has decided each cause in favor of the Railroad Company.

UNEXAMPLED PROSPERITY.—The report of the Directors of the Boston and Maine R. R., for the year ending May 1, 1859, has been sent us, from which we gather the following statements, which give evidence of prosperity almost unexampled in railroad experience:

Gross earnings of the year, \$818,681 22; expenses, including renewals, depreciations and improvements, \$448,458 99; net earnings, \$370,222 23; from which, after deducting 7½ per cent. paid to stockholders in dividends, it leaves a balance of \$54,544 73. All the indebtedness of the road to the State has been paid, the last sum, \$50,000, ten months before maturity.

MOSELEY'S WROUGHT IRON ARCH BRIDGES —AND— Corrugated Iron Roofs. ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.
Spt. 2. MOSELEY & CO.

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANA OR SANDOVAL

FOR

Decatur, Springfield,
Bloomington, Peoria,
Burlington, Quincy,
La Salle, Rock Island,
Dixon, Galena,
Prairie du Chien, St. Paul, and
St. Anthony,
And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANA for all the above points. Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via

PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

B. H. NICHOLS,
Gen'l Southern Agent, Cincinnati.

W. P. JOHNSON,
Gen'l Passenger Agent, Chicago.

RECEIVER'S SALE.

BY virtue of a Judgment of the Court of Common Pleas of Muskingum County, Ohio, rendered in a certain case therein pending, in which the "Clinton Bank of Columbus is Plaintiff, and Douglas, Smith & Co., and others, are Defendants. I will offer for sale, at the Court House, in the City of Zanesville, in the said Muskingum County, at the hour of one o'clock, in the afternoon, on the 13th day of September next, the following described parcels of land, situate in the Western Addition to the said City of Zanesville, as the same is designated and delineated upon the plat of said addition, recorded in the Recorder's office, of said county, in the Record of Plats, Book No. 1, page 13, &c.; that is to say, Lots Nos. 1, 2 and 3, of square 17, in said "Western Addition," appraised at \$150 each. Lots Nos. 4, 5 and 6, of said square 17, together with the strip of land between the south-eastern ends of the said lots, and lots Nos. 10, 11 and 12, in the said square, said strip of land being about 16 feet wide, with the buildings erected on the said lots and strip of land, and the fixtures and appurtenances thereunto belonging, appraised at the sum of \$6,500.—There are erected on the said lots, a brick shop, for the manufacture of passenger cars, 120 feet by 50 feet, roofed with slate, and also a wood car shop, 120 by 40 feet; steam engine and Boilers; 2 Daniels' Planing Machines; 1 upright saw; 1 Turning Lathe, Shaftings, Cones, Pulleys, Hangers, &c., connected with said machinery.

Lots Nos. 7, 8, 9, 10, 11 and 12, of said 17th square, with the buildings erected thereon, and the fixtures and appurtenances thereunto belonging, appraised at \$7,000. There are erected on said parcels, a Brick Machine Shop, 80 feet by 40 feet; a Forge Shop, 40 feet by 40 feet, containing 8 forges; a Carpenter Shop, 120 feet by 26 feet. Foundry buildings, one Lathe, 6 feet swing; 1 Boring Machine; 1 large Screw Cutting Machine; 1 Planing Machine; 3 Hand Lathes; 1 large Drill Press; 2 small Drill Presses; 1 wheel press; 1 Foundry Fan; 2 Screw Cutting Machines; 1 small Drill Press; Shaftings, Pulleys, &c., used with said machinery.

Lots Nos. 1, 2, 3, 7, 8, 9, 10 and 11, of square 21, in said Western Addition, appraised at \$150 each.

Lot No. 4, in said square 21, on which is erected small dwelling house, appraised at \$150.

Lots Nos. 5 and 6, in said square 21, with the buildings thereon, and the fixtures and appurtenances thereunto belonging, appraised at \$800, on which lots is erected a large Foundry building, with Crane, Cones, &c.

Lot No. 12, in said square 21, on which is erected a stable, appraised at \$250.

Lots Nos. 1, 2, 3 and 4, in square 16, in said Western Addition, on which is erected a large frame building, appraised at \$1,000.

Lots Nos. 5, 7 and 8, in said square 16, appraised at \$150 each.

Lot No. 6, in said square 16, appraised at \$175.

The said parcels of land are situated on the line of the Central Ohio Railroad Company, on the west side of the Muskingum River, and immediately opposite the city of Zanesville, and formerly occupied, in part, by the Machine Shops, Foundry, Car Manufactory, &c., of Douglas, Smith & Co., known as the "Muskingum Works." The "works" are well arranged and convenient, and have capacity for a force of from 100 to 150 men. The location is healthy, and the facilities for procuring pig iron, coal, &c., &c., render the location one admirably adapted for such "works." Terms Cash.

And I will also, on the 14th day of September, 1859, at one o'clock, P. M., at the said "Muskingum Works," offer for sale the following personal property used in said "works," to wit:

2 Axle Lathes, 22 inch swing; 1 Axle Lathe, 26 inch swing; 1 Slide Lathe, 20 inch swing; 1 Slide Lathe, 15 inch swing; 1 Slotting Machine; 1 small Slide Lathe; 2 Slide Rests; 1 Grind-stone, with shafts and fixtures; 8 Blacksmith vices, work benches and clamps; 1 Screw Cutting Machine, No. 40; 12 large Anvils; 13 sets Blacksmith Tools; 2 Ripping Saws; 1 Cut-off Saw; 1 large and 1 small Tenoning Machine; 1 Tongue and Grooving Machine; 1 Mortising and 1 Boring Machine; 1 Caul.

Terms Cash.

JOHN TAYLOR, Jr., Receiver.

Aug. 4, '59

June 21, 1859.

Cincinnati, Hamilton and Dayton



RAILROAD.

FOUR TRAINS

LEAVE THE SIXTH STREET DEPOT DAILY.

TRAINS RUN THROUGH TO RICHMOND, LIMA, SANDUSKY, AND DELAWARE WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND NORTH-WESTERN CITIES.

(Columbus time, which is seven minutes faster than Cincinnati.)

6 A. M. EXPRESS TRAIN.—For Cleveland and Pittsburgh, via Delaware, makes close connection at Crestline for Pittsburgh, Baltimore, Philadelphia, and New York; and at Cleveland for Dunkirk, Buffalo, Boston and New York. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 7:30 P. M., Quincy and Galena at 7 A. M. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Muncie. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

S. A. M. MAIL TRAIN.—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STEAMER FOR DETROIT; at Forest with Pittsburgh, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at DELAWARE with the C., C. and C. Road, for Cleveland and points East. Also connects with Junction Railroad at Hamilton for Oxford.

4:30 P. M. TRAIN.—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburgh, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Also, connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago. Also connects with Junction Railroad at Hamilton for Oxford.

6 P. M. TRAIN.—For Dayton, Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 8 A. M.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; at the new Ticket Office on West side of Vine street, between the Post Office and the Burnet House; or at the Sixth Street Depot.
D. McLAREN, Superintendent.

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circular which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the retort is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet,.....	\$300 00
do do 350 ".....	335 00
do do 400 ".....	375 00
do do 500 ".....	450 00
do do 600 ".....	525 00
do do 700 ".....	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, as now in operation in several States, apply to

R. T. COVERDALE,

167 Walnut Street, Cincinnati, Ohio, who has the exclusive right to manufacture and sell in the State of Ohio.
Feb. 24th, 1859.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Booksellers, Country merchants, and others to our extensive stock of School, Classical, Theological, Standard, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the publishers, as well as our own manufacturing of Paper and Stationery, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

BOOKSELLERS,

Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, and Tea wrap-boards, Envelopes, Penholders, Copying Books, Ink and Scales, Sealing Slates, Mucilage, Book rests, Bill envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files: Date Calendars, together with all other articles used in the counting-house.

Stationers,

To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly paged, including all sizes, from the small memorial ledger, and variety of styles workmanship, order of any design, with or without ruling and warranted to be of quality of ruling and durability of binding: all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

BLANK BOOK MANUFACTURERS,

We are prepared to Print and Bind books in any style desired, at rates as low as quality of work cut in this where. Our executing these branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Cards, Circulars, or other of printing, will that we do such jobs despatch. Orders re-

Stereotype, of any description that may be desired, can be executed by our facilities for branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bill Heads, Dray receipts, any other description please bear in mind with neatness and respectfully solicited.

Publishers,

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, *Clark's Compendium*, *Rel. of the Ancient History*, *Plutarch's Lives*, *Josephus*, *Spectator*, *Chain of Sacred Wonders*, *Familiar Science*, *Webb's Monitor*, *Soden's German*, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, of narrative and adventure. Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

3 MAIN STREET CINCINNATI.

W. HARVEY'S SAFETY JOINT For Coupling the Ends of "T" Rails. PATENTED, NOV. 2, 1858.

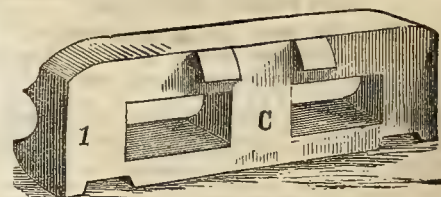


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outside side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

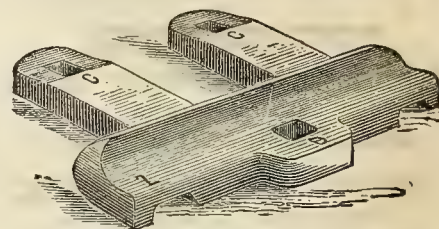
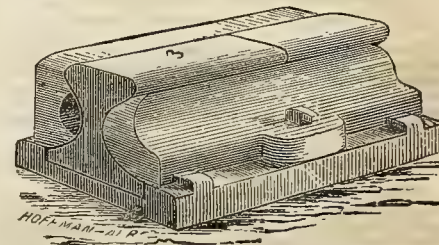


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. At its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other. One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that one part assists and takes the strain of the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly safe road, thereby doing away with the breaking of rails, wheels, and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear of the rolling stock of the road.

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Price Twenty-Five Cents.

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January, 1859.

This work has been carefully compiled and corrected by E. PENROSE JONES, Esq., late Assistant Post-Master of the Cincinnati P. O., from the Records in this Department, and other sources, and contains the most complete list of Post-Offices, especially of the Western, North-Western, and South-Western States, yet published.

MAHLON H. MEDARY,
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The book makes an active pamphlet of about 100 pages. The entire matter is kept standing in type, and as the compiler is promptly advised of all New Offices, Changes and Regulations of the Department, the information is corrected up to the last day of publication, an advantage possessed by no other work of the kind.

Observe, That this list is arranged by States and Counties, making it especially valuable to business men. No similar arrangement has been published since 1856. There are 3000 more offices in this than in any book heretofore issued. The Price is one-half that of any work of the kind now published.

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Mar 10, 1859

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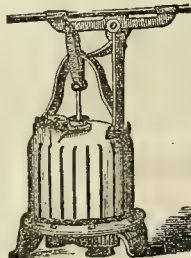
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June 9.

New Time Table

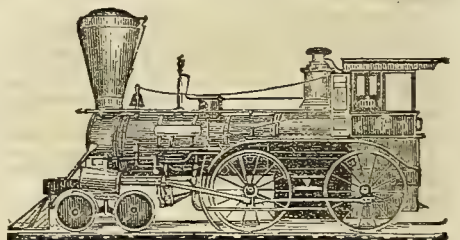
OF THE

NEW YORK CENTRAL R. R.



Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp. 7:40 A. M.	7:00 P. M.	7:40 P. M.
Mail 9:40 A. M.	12:50 A. M.	
New York Exp. 11:15 A. M.	9:00 P. M.	9:00 P. M.
Night Exp. 5:00 P. M.	4:00 A. M.	4:00 A. M.
Utica Accom. 6:00 P. M.	Ar. U. 10:00 P. M.	
N. Y. Mail 11:15 P. M.	10:00 P. M.	10:00 A. M.
Leave Buffalo.	Leave Bridge.	Ar. Alb'y
New York Exp. 5:15 A. M.	5:15 A. M.	3:30 P. M.
Steamboat Exp. 8:00 A. M.	8:00 A. M.	8:00 P. M.
Mail 11:15 P. M.	2:30 P. M.	
Cleveland Exp. 6:00 P. M.	6:00 P. M.	4:40 A. M.
Cincinnati Exp. 11:00 P. M.	11:00 P. M.	8:30 A. M.
Utica Accom. 11:00 P. M.		10:00 A. M.

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LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.
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P. DUDLEY,
President of the Board.

Jan 5th.

The Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:
Thursday Morning, Sept. 8, 1859.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
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To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

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" " per month, 10 00
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" " per annum, 60 00
" page, single insertion, 15 00
" " per month, 25 00
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THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

New York and Erie Railroad.

NEW YORK, Wednesday, Sept. 7.

General order No. 2, dated September 7, Receiver's Office, New York and Erie Railroad Co., reads thus:

"I have this day appointed Charles Minot General Superintendent of the road, with power to issue such rules, regulations and orders as may be necessary for administering the duties of his office, subject to my approval in writing."
(Signed.)

NATHANIEL MARSH, Recorder.

This is considered a capital appointment on all sides.

TRANSPORTATION OF CATTLE BY RAILROAD.—The *Tribune* of Thursday has the following on this subject:

We beg our friends in the prairie regions to remember that cattle, however sleek upon grass, will wilt like green corn upon the railroad. Farmers must feed them corn, and none but a green drover will buy green steers to transport a thousand miles. If well fed one winter and then turned to grass, they will bear transportation. They will bear it much better if shipped straight from the feeding lots, where they have had a full feed of corn all the time. That is the sort of feed that "sticks to the ribs."

It is reported that cattle can be shipped over the Erie Road at four dollars a car less than heretofore—that is, as \$79 against \$83—and it is also reported that the Central Road will be after the Erie Road dollar for dollar, and that a reduction of seven dollars a car has already been arranged for on the Western roads, so as to make the transportation to Buffalo as low as to Dunkirk.

RAILWAY MANAGEMENT.

AN EXAMPLE AND A MORAL.

We think it will be found, upon examination, that the *success* of a railway depends more upon its *management* than upon its *location*. If we compare the leading railways of this country, one with another, we shall find that one is successful, and its neighbor, similarly situated, is quite the reverse—and for reasons not apparent to a casual observer.—But if we look below the surface, the whole becomes perfectly plain.

It is not our purpose to point out delinquent managers; or to draw invidious comparisons. We only wish to direct the attention of stockholders to the subject, in order that they may apply the remedy. But to make our position clear, we shall have to give some examples of the expenses of different roads, in order to show *where* the leaks in the management are most apparent, and the point where stockholders would do well to begin their reforms.

As we have lying before us the report of the Pennsylvania R. R. for the year 1858, and a synopsis of the reports of the Galena and Chicago for five years ending in 1858, we shall make use of those to illustrate our position.—These two roads, however, are widely different in location. The one traversing, for nearly two-thirds its course, a broken and mountainous country, where the wear and tear upon rolling stock and machinery is enormous, and where the most formidable natural obstacles have constantly to be met and overcome; while the other stretches out over a beautiful prairie, for the greater portion of its length, and just rolling enough to facilitate drainage and secure a solid road-bed, and where the only natural impediments to be encountered, are occasional storms in the winter months. But, perhaps, this very difference in location will serve to make our position stronger than if the two roads were similarly situated. We find the following facts reported:

GALENA AND CHICAGO.

Miles run by Company's trains—5 years.....	4,253,104
Cost per mile run for locomotive repairs, in cts....	7.32
" " " fuel.....	23.33
" " " oil and waste (stores).....	3.15
" " " locomotive service, wages.....	7.90
" " " above items.....	41.70

PENNSYLVANIA.

Miles run by Company's trains—1 year.....	2,209,135
Cost per mile run for locomotive repairs, in cts....	8.18
" " " fuel.....	9.63
" " " oil and waste (stores).....	1.22
" " " locomotive service, wages.....	4.14
" " " above items.....	23.17

This shows the prodigious difference of 18.53 cents per mile run, between the cost of service of four items only, on the two roads. But when we consider that the mountain division of the Pennsylvania road costs, for locomotive repairs, stores and fuel alone, 30.24 cents per mile run—or more than double that of any other portion of the road—the difference between the cost of service on the two roads becomes appalling. Throwing out the

mountain division, the account would stand:

GALENA ROAD.

As above—per mile run in cents.....41.70

PENNSYLVANIA ROAD.

Cost per mile run exclusive of mountain division:

Cost per mile run, locomotive repairs, in cents.....	5.46
" " " fuel.....	8.94
" " " stores.....	1.06
" " " service—as on whole line.....	4.14
" " " for above items.....	19.60

This shows a difference of 22.10 cents per mile for locomotive service, in favor of the road most difficult to operate.

But, it may be urged that Illinois, being a prairie country, fuel is necessarily more expensive there than in the wood and coal districts of Pennsylvania. Perhaps this may be so, and we will throw out the fuel item altogether. The account will then stand:

Galena road, repairs, stores and service.....	18.37
Pennsylvania " " " ".....	10.66

Difference in favor of Penn. road..... 7.71

Or about 71 per cent.!! Should this difference occur in all departments of expenses on the two road—and we have no reasons for supposing that it does not—we think our readers will have no difficulty in arriving at the same conclusions that we have, namely: That the success of a railway, as dividend paying stock, depends more upon its *management* than on its *location*.

The figures above given may represent extreme cases, and may not be altogether a fair parallel between the management of the two companies. But there is truth enough in them to warrant stockholders in overhauling the management of their several roads, and see if some reforms can not be introduced by which their establishments may not be rescued from bankruptcy, and themselves from ruin. We would not, however, be understood as impugning the *honesty* of our railway managers—for so far as our experience goes, and it is by no means limited, we have found our railways, as a general thing, in the hands of most honorable and upright men—men thoroughly tried and proved in other responsible positions. But because a man is *honest*, it is no sign that he is *capable*, and the fact need not be disguised, that too many of our great public works are in the hands of, and under the management of men, whom a shrewd business man would hesitate to put "in command of a one-horse grocery," as the western phrase is, and that if we would extricate our railways, and the hundreds of millions of capital they represent, from the slough into which they have fallen, a thorough revision in their management is absolutely indispensable. D.

The gross earnings of the Cincinnati, Wilmington and Zanesville Railroad for the month of July, 1859, were as follows:

From Passengers, Mail, and Express.....	\$6,213 52
From Freight.....	6,033 66
Total.....	\$12,247 08

The total expenditures were \$11,168 96; nearly one-third was on roadway account.

RAILROAD CONSOLIDATION.

It was announced last week that a consolidation of earnings had been made between the Little Miami and Columbus and Xenia and the Cincinnati, Hamilton and Dayton Railroad Companies. We are not fully advised of the details of this arrangement, but understand it to be substantially as follows:

The L. M. & C. & X. representing 155 miles, are to receive seven-tenths, and the C., H. & D. three-tenths of the earnings of the consolidated companies—each corporation retaining fifty per cent. of its own receipts as a commutation for expenses, etc.

This arrangement seems a fair one, as between the companies; and if carried out in good faith, and we see no reason why it should not be, will strengthen these corporations materially by doing away with ruinous competition and enlarged expenses consequent upon such competition. Yet the question will thrust itself forward: Will the public be benefitted by the arrangement?

This question is easier asked than answered. We are, and ever have been in favor of every legitimate measure calculated to enhance the value of our railway stocks, so that our roads may pay a reasonable interest on the investment, for thereby the community is greatly benefitted; yet we are by no means certain that this kind of consolidation is the best means of advancing the real interest of railroad companies, or the traveling public. Still if the managers of these roads consult their true interests, and make no attempts to take advantage of their position by advancing, unreasonably, the rates of fare, we do not see why all parties may not be bettered by the arrangement.

We have, however, no great faith in the consolidation or its perpetuity. Yet, it may survive the five years for which it is made; but if it does, it will be an exception to the general fate of all combinations of the kind. The interests thus combined are, to a certain extent, identical; but, beyond that, many elements are concerned that can not readily be harmonised, and we shall not be surprised if this compact speedily shares the fate of its many "illustrious predecessors." We shall not regret it, if it does, for we believe there are better methods of harmonising rival interests than by consolidations; for, as before said, these consolidations, unless judiciously and carefully managed, result disastrously to all concerned. In railroading as in merchandising, "every tub should stand on its own bottom."

These consolidations can only affect the through business of the roads making them. Hence they are not so important as an economical management, and a judicious fostering of local traffic, for railroad managers are beginning, though slowly, to learn the great fact, that the local business of a road is quite as important as through business, and that

those roads which pay most attention to local trade, are the most successful.

As an example of local business, we would point to the N. Y. Street Railroads, where a single line—three miles in length—receives nearly as much per annum for passengers, at five cents each, as one of our roads twenty times as long, with all its array of locomotives and cars, receives from all the freight and passengers, through and local. This fact alone is worth volumes of essays on railroad management.

THE STRIKE ON THE MICHIGAN SOUTHERN R. R.

The public are aware of the fact that the trains on the Michigan Southern Railroad have been stopped since the 1st inst., by a strike among the employees, who have permitted nothing to pass over the track except an engine with the mail cars. The workshops along the entire line of the road have been deserted, and meetings of the employees have been held at two or three points, at which it was resolved not to resume work until they were paid at least three months back wages, and an arrangement made which would guarantee their pay, in future, between the 10th and 15th of each month.

The men who have joined in the strike have issued the following appeal:

"The Company are now in arrears to us four month's pay. We have demanded no settlement. We have taken no steps to force the Company to a settlement, but they, of their own accord, say that they will settle with us for back pay in scrip, which will be redeemed for freight, as follows: in six months, five months, and four months; and

"Therefore, we, the employees, refuse to take this scrip; and, furthermore, we consider it necessary to devise some means or plan to enable us to bring about a settlement with the Company, in which we invite your cooperation.

"It is impossible for us to remain longer without our pay, as there are many of us without a dollar, yes, without a shilling with which to buy bread for our families. There are many of us who receive but seventy-five cents per day, and have large families to support. Is it possible, we ask you, for us to live under such circumstances? No, we do not live; but the pride of manhood restrains us from making known to the public the expedients we have to resort to to keep body and soul together. There are many of us who have had to sell our time at a sacrifice of ten or twelve per cent., and we receiving but moderate wages. What can we do with scrip? We understand there are some individuals in Laporte, connected with the road, who say they will buy the scrip when it becomes due at ten or twelve per cent. discount. Is that just, we ask you?

"Some may think this movement to be premature, but we think not, for we have resolved to act with reason and consideration; for, judging the future by the past, we know that on roads—yes, on all roads—where they have issued scrip, it has proved ruinous to those who have taken it.

"Therefore, we lay our grievances before you, trusting that we shall receive the support and sympathy of our fellow-citizens, and the public at large, for we want nothing but justice."

NEW YORK & ERIE RAILROAD.

There are other interests involved in the successful operation of this great artery of trade than the mere per centage of its owners. But, while it is proper that those interests should be duly cared for, no one can question the absolute duty of its managers to so conduct the business entrusted to their care, as to afford a reasonable compensation to those who have invested their means in its construction. If the road, however, is incompetent to produce the requisite amount of net income to pay the necessary interest on its bonds, and a reasonable dividend to its stockholders, it is to the interest of all parties that some scheme should be adopted to place the different classes of claimants on an equitable footing.

All parties must necessarily be benefitted by the adoption of some similar plan to that suggested by the committee. Of the justness of the division, we do not now propose to speak, but simply remark that we can not, for a moment, conceive the propriety of insisting on high nominal values being placed on stocks that do not produce dividends. It would be far better to reduce the capital of the Company, to a point that reasonable dividends can be realized on it, and that it would be much preferable, while they are at this work of reduction, that it should be done efficiently, so that no second attempt will ever be rendered necessary.

Below we give the report of the committee of directors appointed to present a plan for the re-organization of the company, and also, the action taken thereon by the Directors:

To the Bond and Stockholders of the New York & Erie Railroad Co.:

The embarrassment of the Company and the action of its creditors having resulted in the appointment of a receiver, the directors have lost no time in endeavoring to mature a plan by which the interests of all would be promoted. The most practicable means of harmonizing the various interests involved is contained in the following report of their committee. The committee appointed to devise a plan to extricate the New York and Erie railroad from its present difficulties, report that the capital stock and indebtedness of the company are represented as follows:

First Mortgage Bonds	\$3,000,000
Second do.	4,000,000
Third do.	6,000,000
Fourth do.	3,705,000
Fifth do.	1,253,500
Total Mortgage debt.	\$17,958,500
Unsecured bonds, and interest due on them.	7,825,150
Capital Stock.	11,000,000

Total. \$36,883,650

Bills payable, for the payment of which \$1,500,000 fourth mortgage bonds are pledged. \$320,000

[The payment of the amount due to employees for past services, and for materials and supplies, is provided for in the order of the court appointing a Receiver, for which all the earnings up to the 1st of December will be required.]

Coupons due on Mortgage Bonds.	211,000
Coupons to fall due:	
September 1, on Second Mortgage Bonds.	140,000
Do. Third do.	210,000
October 1, on Fourth do.	129,675
November 1, on First do.	105,000
December 1, on Fifth do.	43,872

Total. \$1,159,547

To pay this sum of \$1,159,547, and to reduce the bonded debt and capital stock of the Company, the committee propose the following plan:

Convert the unsecured Bonds and interest \$7,825,150 at 80 per cent. into new stock at par.....	\$6,260,120
Exchange old stock, \$11,000,000 at 20 per cent. into new stock at par.....	2,200,000
	\$8,460,120
Assess this \$8,460,120 of new stock 10 per cent. and give new stock at par.....	\$846,012
Convert two Coupons from each of fourth and fifth mortgage bonds, due half in Oct. and Dec., and half in April and June next, into stock at par.....	347,095
	1,193,107

New Stock.....	\$ 9,653,227
Bonded debt.....	16,958,500

Thus reducing the entire debt and capital stock of the Company to.....\$27,611,727
—with the exception of \$210,000 due on 1st Sept. for third mortgage interest, for the payment of which a delay of twelve months is asked.

This plan, of course, contemplates that the second mortgage bonds will be extended either by exchange from the remaining bonds of the third series held for that purpose, or by a new sheet of coupons.

Why should this plan or any similar one be adopted? will be the question asked by those interested.

To the holders of the bonds secured by mortgage we may urge the equity of extending to the unsecured creditors and stockholders the benefit of the property pledged to them beyond the amount necessary to secure their debts. They are asked to part with no security; their overdue interest is provided for, and all the guarantee of prompt payment in the future, that an improved organization on a reduced capital can give will be secured to them.

Whereas, in all probability, if an attempt be made to cut off by foreclosure entirely the unsecured debt and stock such an immense interest will oppose every obstacle that legal ingenuity can invent to thwart the foreclosure, and for years to come this property, the value of which depends so much upon skillful management, will be left to the management of the courts and lawyers; and the revenue, if any, will be kept under the control of the courts, until the legal rights of all the parties are determined. Five years would, in all probability, be as short a time as so large and intricate a subject could make the circumlocution of our courts, during all of which time the receiver must operate the road under the orders of some thirty or forty different judges. That much revenue can be expected from a road thus managed—no matter how good the receiver—is not to be even hoped for.

To the unsecured creditors and stockholders the inducement is still greater.

Their condition at the end of the protracted litigation above alluded to would probably be a total loss of their interest, with the addition of large expenses, while by paying the small assessment, for which they receive new stock, they at once come into possession of the road, and control its management under the new organization.

Taking the gross receipts of the road for the last twelve months, (\$1,500,000,) and it is hard to conceive of any casualty that would ever again reduce them so low; the net result shows more than sufficient to pay seven per cent. per annum on over \$20,000,000, besides expending during that period \$760,000 on the road; and the statement for the last six months shows even a more favorable result.

By this compromise, if promptly carried out, the stock would, in the opinion of the committee, soon be a dividend paying investment, and the bonds of the company at once take a

high position in the market among the favorite railroad securities of the country.

Respectfully submitted,

SAMUEL MARSH,
DANIEL DREW,
E. J. BROWN,
HERMANN GELPKEE,
E. K. ALBURTIS.

New York, August 27, 1859.

In submitting the foregoing plan to the creditors and stockholders, the Board of Directors are aware of the difficulty of bringing so many interests, represented by so many parties, to concerted action. The peril in which many of the interests are placed by the pending legal proceedings calls for prompt action. Those who consider their bonds secured by a pledge of the franchises of the company, if left to the conclusion that they must rely upon the prosecution of their legal rights in the courts, will, of course, suffer no delay in thus enforcing their claims; whereas, by the plan proposed, they will see that their interest will be sooner paid, and their rights more certainly protected, than by the law's delay and uncertainty. But this must be evidenced by immediate action, and it is to induce such action, and to place before those interested a basis of amicable and equitable adjustment that the Directors make the foregoing suggestions, and that they now call on the creditors and stockholders to take prompt measures to protect their several interests, as far as they can be protected by the property and franchises of the company.

In furtherance of this object the Directors have prepared this recommendation in the form of a circular, and directed their Secretary to transmit a copy to the bond and stockholders so far as known, and to furnish copies to all parties calling therefor, and they respectfully solicit that each party interested in the bonds, or who approves of the plan here recommended, should signify such approval to the Secretary, No. 45 Wall Street, with as little delay as possible.

By order of the Board.

[For the Railroad Record.]

GREENVILLE AND FRENCH BROAD VS. THE BLUE RIDGE R. R.

WASHINGTON CITY, July 28, 1859.

DEAR SIR:—In looking over the Charleston files of papers, I perceive that their columns have been opened to the discussion of the novel question, of the "Greenville and French Broad vs. the Blue Ridge Railroad." The object, no doubt, is to elicit all the information that can be obtained, with regard to each route. This being the end to be attained, a statement from one who has been familiar with both enterprises, from their incipient state, and who feels a deep interest in every thing that pertains to the Carolinas, may not be altogether uninteresting to those whose object is to know the comparative advantages and disadvantages of each route. All will admit that South Carolina, in the division which she will be called on to make, ought to be governed by her own interest, and which ever will best accomplish that object ought to be adopted.

Most of the persons who feel an interest in either of those enterprises, have, no doubt, made themselves acquainted with their locali-

ties, and that the object to be attained is to connect the railroads of South Carolina with the railroads and steamboat navigation of the Valley of the Mississippi. But to demonstrate the connections which will be effected, with the prospect of commanding through freight and travel, it becomes necessary to advert to the charters and locations of each route. The Blue Ridge Road was chartered by the States of South Carolina, Georgia, North Carolina, and Tennessee, about the year 1850. The charters were of the most favorable kind, free from any restrictions calculated to control trade to the disadvantage of the company. They authorized the construction of a road of the same gauge of the roads of South Carolina and the Mississippi Valley (five feet) which would enable the different companies to avoid transshipment between, not only the roads of South Carolina, but also between Charleston and the principal cities in the Valley of the Mississippi. To accomplish those objects, seemed to be desirable to all the parties interested. The road was surveyed, located, and estimates formed of the cost, by some of the ablest engineers in the United States. The road, as located, extended from Anderson, South Carolina, ascending and crossing the Blue Ridge at the Rabun Gap, by a maximum grade of but little upwards of sixty feet, and then descending through the valley of the Tennessee to Knoxville, at a maximum grade of forty-five feet to the mile. The whole distance about 194 miles. The depression at the Rabun Gap, in the Blue Ridge, in which the head springs of the Tennessee and Savannah, one extending south and the other north, which rise within a few feet of each other, forms much the lowest gap in the Blue Ridge. The construction of this road commenced several years ago, with State aid from the States of South Carolina and Tennessee. From Anderson to Pendleton—fourteen miles—the road has been completed. And a large portion of the grading, culverts, and tunnels, etc., have been completed. The great obstacle encountered in passing the Blue Ridge, is a tunnel of a mile and an eighth, at the Himp House mountain in ascending the Blue Ridge. That is expected to be completed within the next year, and being through a solid rock, required a much longer time to construct it; but, when finished, the work is permanent, and requires no arching or repairs. No tunnel is required at the Blue Ridge, and only a cut of five feet; and then passing down through the valley of the Tennessee to the village of Franklin, the construction is very light. This much of the road, if managed with energy, may be completed in the next two or three years. The village of Franklin, in Miami county, N. C., is near midway between Anderson and Knoxville. And when that point is reached, the New England of the South, with its superior soil, climate, water power, and mineral wealth, webbed over with several hundred miles of turnpikes, will be

penetrated. Already within a short distance of Franklin, some ten or twelve copper mines have been discovered, which, by the best judges of that mineral, are believed to be as valuable as mines of the same description that have been extensively worked for several years, at Duck Town, situated west of Franklin. Upon the road, therefore, reaching this point, the development of the mines will, no doubt, furnish considerable freight. And, besides this, the freights from the extreme western counties, which hitherto have mostly been carried to Athens, Georgia, will be intercepted and transferred to the South Carolina Roads. When the road shall progress a little upwards of twenty miles down the Tennessee river, below Franklin, the valleys of the Tuckasega and Nantihala will be reached. The former east and the latter west of the line. And where, very probably, two railroads will come in; one connecting with the roads of North Carolina, and the other from Duck Town, a distance of sixty-five miles. That line of road pass through the fertile valleys of Valley river and Highwassee. With extensive quarries of soap stone and white statuary marble, and some of variegated colors. Also, inexhaustible mines of iron ore, and the black oxyde and yellow sulphurate of copper, now extensively worked in the vicinity of Duck Town, will necessarily lead to the construction of this and the road through the Valley of the Tuckasega, if the Blue Ridge Road be extended to the designated point.

The importance of this communication with Duck Town, requires a passing notice. Duck Town is a settlement of miners, a large portion of whom is experienced miners from Cornwall, England. Until within the last few years, the copper ores were boxed up, hauled by wagons to Cleveland, on the East Tennessee and Georgia Road. From this sent by railroad to Savannah, and shipped to New York and Baltimore. This trade, for several years, employed upwards of a hundred wagons and teams between the mines and Cleveland—a distance of forty-two miles—at a cost of about ten dollars per ton, and then upwards of four hundred miles by railroad, cost near the same amount. By the Blue Ridge Road the distance would not exceed four hundred miles. By avoiding transshipment, the shipments of copper and copper ores could be transported over that road to Charleston, at ten dollars per ton. Supposing the road that extended this far to transport a supply of copper and ores, etc., including the imports of merchandise to that point and on the line, thirty thousand tons, at \$10 per ton, would give an income to the entire line of road of \$300,000. This is an item, even if the road be extended this far, which is not without some importance to a freight road. The large number of smelting furnaces, already erected at a cost of from ten to fifteen thousand dollars each, prove that the miners regard the sources of mineral wealth inexhaustible.

But when the road shall be completed to Knoxville, at which point already near fifteen miles of the road from Knoxville to Marysville have been graded, other commercial connections will be reached of much importance to the Blue Ridge Road. At Silico, on the Tennessee River, which will become the head of steamboat navigation, a branch will diverge west to Athens, on the East Tennessee and Georgia Road. This road, which is only thirty miles long, has been chartered with State aid, by Tennessee, and its construction awaits the certainty of the construction of the Blue Ridge Road. That branch completed, would secure a connection by railroads of the same gauge, over which South Carolina exercises a considerable influence, with Chattanooga on the Tennessee, Nashville on the Cumberland, and Memphis on the Mississippi River. And the extension of the Blue Ridge Road to Knoxville would cause the further extension from Knoxville to Danville, which has also been chartered with some State aid. This road would be one hundred and forty miles long, and would open up the great iron and coal region, and, at the same time, complete the railroad connection with Cincinnati and Louisville, and with all the Railroad and Steamboat lines which traverse the Valley of the Mississippi more than thirty thousand miles. And by the examination of the map of the United States, it will be seen that by the Blue Ridge Road, Charleston would become the nearest seaport on the Atlantic, to the center of this vast commerce. And while this route secures a northern connection with Cincinnati and Louisville, it has the double advantage of securing a favorable connection with the entire North-west and West. And while it would secure for Cincinnati and Louisville a southern connection at Charleston, it at the same time would afford an outlet to the Gulf, and the other great cotton, vine and sugar growing States, which furnish the natural and best market for a large portion of the breadstuffs and provisions of the Ohio Valley, which would be connected by the natural lines of trade, and which are the shortest and cheapest lines that can be established between the producers and consumers.

Next in order is the Greenville and French Broad projected road, and its prospects of commercial facilities, not yet commenced. To estimate the capacity of the road, we must surmise its being built agreeably to the requirements of the charter.

The Charter extends from Greenville, or Spartanburg, S. C., across the Blue Ridge, through the Valley of the French Broad to Morristown—a distance of one hundred and forty-four miles—on the East Tennessee and Virginia Road, forty-two miles above Knoxville, and within a little upwards of four hundred miles from Petersburg and Richmond, and near the same distance from Charleston and the Ports of North Carolina. The Char-

ter was granted in 1854. At the same session the State of North Carolina appropriated \$4,000,000 to extend her own roads to the French Broad river, above Asheville. Hence restrictions were placed on the Greenville and French Broad charter to make it acceptable to the State. Having previously granted South Carolina an unrestricted pass through the Valley of the Tennessee, it was but reasonable that she should reserve to her own road, not only a connection with the Blue Ridge road, but also an independent outlet through the French Broad valley, which were intended to be provided for in the restrictions imposed on the Greenville and French Broad charter. Which were:

1st. That the road should be built of the same gauge as the North Carolina roads within North Carolina, (4 feet 8½ inches.)

2d. That as soon as the North Carolina Western Road reached the French Broad, the State should have the right to take the portion of the Greenville and French Broad Road, below the junction, and attach it to her road, to be paid for in the stock of the road.

With these provisions, if the road be built, its gauge in North Carolina, from the junction near Asheville, to the South Carolina line, must conform to the North Carolina gauge. In the States of South Carolina and Tennessee, the gauge is five feet. Hence it would consist of two gauges.

Commerce from Knoxville, the center of East Tennessee commerce, would be under the control of the East Tennessee and Virginia Company, because by the terms of their charter, no parallel road can be built within twenty miles, without the consent of the company. And it will be the interest of that company to discriminate in favor of freight and travel centering on their road, and in favor of the ports of Virginia, against the ports of North and South Carolina. But not only this hindrance, transshipment must take place to reach the Greenville and French Broad Road, on that part of it to be carried by North Carolina. And as soon as it gets on that road, it will be the interest of this State to discriminate in favor of her own roads and her own ports, against the roads and ports of South Carolina. And again transshipment must take place at the junction to reach the Greenville and French Broad Road, and again another transshipment at the North Carolina line, or where the change of gauge takes place. With these restrictions on travel and commerce, it is for the people of South Carolina to determine to what extent the State would be benefited by abandoning the Blue Ridge Road, with the loss of the millions expended on it, for the route through the French Broad Valley. And see the Rabun Gap in an air line from Charleston to the center of the Mississippi Valley opened to Georgia and closed forever against South Carolina.

A NATIVE CAROLINIAN.

[From the Council Bluffs Bugle.]

PLATTE COUNTRY R. R.

St. JOSEPH, Mo., Aug. 15, 1859.

Dear Sir:—On the 24th of February, 1853, the Legislature of Missouri chartered a railroad, by the style of the "PLATTE COUNTRY RAILROAD COMPANY," with a capital stock of two millions of dollars, divided into shares of fifty dollars each, with the provision that, so soon as three thousand shares should be subscribed, the Directors nominated in the charter, should cause an election to be held for 9 directors; and that said company should have "full force to survey, mark, locate, and construct a railroad from the western termination of the Pacific Railroad, in Jackson county, to the town of St. Joseph, in Buchanan county, with the privilege of extending the same to the northern boundary of the State."

Within the prescribed period, the chartered Directory met, and opened books for the subscription of stock, but the work, for the time, was thought to be impracticable, and the little interest in it, manifested at first, soon died away.

On the 4th of July, 1855, a convention was held in Sidney, Iowa, with a view to a concerted action in the two States, by which the matter could be revived, and the road constructed beyond the Iowa line to Council Bluffs. I had the honor to be President of that convention, and can testify to the zeal awakened on that occasion, and to which expression was given in a series of resolutions, which, I think, were principally drafted by Mr. Douglass of your city.

Several months were passed in efforts to procure subscriptions, and in correspondence with several of your leading citizens, when I was informed that nothing could be done in Council Bluffs to advance the work, as the attention of the people there was directed eastward. A few friends of the road barely kept it alive here, until the 3d of March, 1857, when the Legislature enacted "that the sum of seven hundred thousand dollars, in bonds of the State, is hereby loaned to the Platte Country Railroad Company, one-half of which amount is to be expended on that part of said road between the cities of Kansas and St. Joseph, and the other half between St. Joseph and the Iowa line."

It was not long after this that the stock was taken and the company permanently organized, with the Hon. Armstrong Beattie, President; but in consequence of the stringency in the money market, no progress was made in the work.

Within the past month a new Directory was elected, and Col. Osborne, a gentleman of great experience in railroading, and of the most indomitable energy, was made President of the company. He at once set his engineers to work on the upper line, and made an arrangement with the St. Joseph and Atchinson Railroad Company by which their road is merged in the Platte Country Road, and obtained \$100,000 of the State bonds to aid in the prosecution of the work, and he is determined to leave no effort unused, nor to lose one hour of time in pressing it up to the Iowa line at the earliest practicable period. Here are three routes proposed, and the engineers are now out to test their relative eligibility, and this evening, my brother, Col. M. Jeff. Thompson, and Mr. W. L. Irvine, set off to canvass the country along each contemplated line, with a view of obtaining relinquishments to the right of way.

There is now no doubt that the road will be constructed to the Iowa line, and the question

is, what will the people of Iowa do towards continuing it up to your city? Can you not interest them in it so far that they will take immediate action and be prepared to meet us at the line? Can you not arouse them to its importance? Every man in Western Iowa and Eastern Nebraska is conscious of the benefits that he would derive from it, in the convenient facilities which it would afford to market for all the products of that rich country, in immigration of population, in the enhancement of property, and in the increase of trade and business in all of their departments. To argue this self-evident proposition would be a waste of time, and it will, therefore, be only necessary for them to know that the thing is now possible; that with a reasonable effort they can now have the road; and that it is incumbent upon every one of them to take a personal interest in the matter and to give it a portion of his everyday attention.

I have penned this note speedily to inform you of the progress of a work which affects you so momentously, and I will either be to see you soon, to talk with your citizens, face to face; or will write you more at length, and give you my views more fully, freely, and, I hope, more forcibly—so forcibly, at least, as to interest your citizens in this important enterprise.

Very Respectfully,

W. BROADUS THOMPSON.

THE TERRE HAUTE, ALTON AND ST. LOUIS R. R. CO. AND ITS EASTERN CONNECTIONS.

The unequalled speed of this route, as satisfactorily demonstrated by the regular delivery of the New York morning and evening papers in this city only *forty-eight hours* after publication, has placed its name so prominently before the public, that a description of it and its Eastern connections can not but prove interesting to the public.

It is located in one of the finest agricultural regions of the Prairie State, passing through the most beautiful sections of ridge and level prairie, for which our sister State is noted. It starts from East St. Louis, or as it is more familiarly known, "Bloody Island," and running north east through the American Bottom to the Alton Junction, twenty miles from here, takes a due east course, which it retains throughout almost its entire distance. Bunker Hill, Litchfield, Hillsboro, Pana, (the junction with the main line of the Illinois Central,) Shelbyville, Windsor, Mattoon, (the junction with the Chicago Branch of the Illinois Central,) Charleston, and Paris, are amongst the most important of the Prairie cities in embryo which line the route. These places are rapidly increasing in population, and give strong evidence of the thrift and enterprise of the citizens. On all sides, beautiful farms dot the prairies as far as the eye can reach.

The Company deserve great credit for the extensive and thorough repairs which they have recently made on their track and rolling stock. We hazard nothing in saying that it is now as smooth, if not the smoothest and the best appointed road in Illinois, and it appears to be the intention of its present officers to keep it so. Such is the speed they make, that you seem hardly to have passed out of sight of St. Louis, with her smoking manufactories, her levee, filled with the produce and lined with steamers from all the navigable waters of the Great West, taking a few gentle sniffs of the prairie air, when you find yourselves crossing the Wabash on one of the best rail-

road bridges in the country, and entering the city of Terre Haute, where you make immediate connection with the Terre Haute and Richmond Railroad, (one of the *best constructed and best managed* roads in the whole country,) for Indianapolis. Arriving at the "Capital of Hoosierdom," you enter the Union depot, the place for the arrival and departure of eight different railroads, diverging to all points of the compass.

The principal Eastern connections of this road are the Bellefontaine and Indiana Central Railroad.

The Bellefontaine—an old favorite with travelers—runs due north-east from Indianapolis, through Anderson, Monroe, Union, Sidney, and Bellefontaine to Crestline, where, passengers bound eastward change for Cleveland or for Pittsburgh; Crestline being the junction with the C. & C. and Pittsburgh, Fort Wayne and Chicago Railroad. Or, if you are going via Columbus, you are *switched off* at Union, and a fresh locomotive hurries you rapidly on in the direction of the Capital of Ohio. The Bellefontaine furnishes one of the main links in the fast line to New York or to Philadelphia, Baltimore, and the eastern shores. For speed, good road, gentlemanly management, and every thing that will tend to the comfort of travelers, (not excepting the famous sleeping cars,) this route can not be excelled, and under the able superintendence of its present efficient chief officer, Col. Jno. Brough, it is destined to be one of the greatest thoroughfares of travel, and of freight between the east and the west.

The Indiana Central Railroad runs due east from Indianapolis to Columbus, through Richmond, Dayton, Xenia, and many of the most thriving and populous inland towns of Ohio. At Columbus connection is made with the C. & C. R. R., for Cleveland or Pittsburgh, with the Central Ohio, for Wheeling, and also with the Pittsburgh, Columbus and Cincinnati, better known as the Steubenville Short Line Route, for Pittsburgh and the East. The Indiana Central can boast of its superior track, spacious saloon cars, and of being the great central route to the east, and between the capitals of Indiana and Ohio. It is under the able and efficient management of Mr. H. L. Pope, as General Superintendent, most ably seconded by Mr. H. C. Parrott, as General Ticket Agent. The Local Agent of the Central at this point—Mr. F. A. Foster—is active, gentlemanly and efficient, and contributes very largely to the passenger business of the road.

The Steubenville Road from Columbus is comparatively new, but is certainly a superior one, combining all that can be claimed for any other route from that city east, and when it will discriminate less in favor of Cincinnati and the Ohio and Mississippi Road, and more for its legitimate and shortest connection westward, will take its full share of the travel. The road is ably managed by Judge Jewitt, its President, and by its most gentlemanly and enterprising General Ticket Agent, Major Ira A. Hutchinson, and General Traveling Agent, General Henry Wilson, than whom more thorough or efficient officials no western road can boast.

Such are the main connections of the Terre Haute, Alton and St. Louis Railroad for the great Eastern travel, and by which connection is made with the Lake Shore Railroad for Erie, Dunkirk, and Buffalo, at the two latter places with the New York and Erie, and New York Central Railroads for Albany, Elmyra, New York, Boston, and all intermediate cities in the East and North-east; at

Crestline with the Pittsburgh, Fort Wayne and Chicago, and Pennsylvania Central for Altoona, Harrisburgh, Baltimore, Philadelphia, and other Eastern cities via Philadelphia; and last, but not least, at Columbus with the Ohio Central for Wheeling, and with the Baltimore and Ohio Railroad for Cumberland, Harper's Ferry, Baltimore, Washington City, and other Eastern cities by the way of Baltimore and Philadelphia.

Taken as a through line, the Indianapolis can not be equalled by any other route from St. Louis in *speed*; and a careful examination of the respective distance tables of the several roads, will convince even the most skeptical, that it is the shortest route. For instance, let us take Columbus as one of the meeting points for Eastern travel, we find this the shortest line by twenty-nine miles, and if we take Crestline, another important junction, it is sixty-five miles the *shortest*.

Another great advantage claimed is, that all changes of cars are made in union depots, whilst other routes are subject to transfers by omnibuses of from one to three miles, at intermediate points. The geographical position of this road insures it a large traffic, local to itself alone. With its connections with Chicago and Cincinnati, it becomes a dangerous competitor for the business of both those cities. In addition to its Eastern connections at Indianapolis, we must not omit the Jeffersonville Railroad for Louisville, Frankfort, Lexington and points in Southern Kentucky, and Northern Tennessee; the Indianapolis and Cincinnati for Lawrenceburg, Cincinnati, Covington, Paris, Lexington, etc. Also, the Peru and Indianapolis Railroad for Peru, Fort Wayne, Toledo and all the Northern and Lake cities.

From the above some idea may be formed of the importance of this route and its connections. We are happy to see that it is becoming well known, and that it is beginning to be appreciated by the traveling community and shippers. That it is destined to be the main link in the great central route between the East and the West, nay, between the Atlantic and the Pacific, no one can for a moment doubt, after an impartial examination of the geographical position.

As an evidence of the determined energy of the new President of the Terre Haute road to free it from embarrassment, we may name in this connection that between the 20th and 25th of this month, this company has paid, in full, the labor rolls for May and June. Hereafter, payment will be made monthly, between the 15th and 20th of each month, keeping one month behind during the fall and winter. Any man in the employ of the Company can have his discharge at any time, and be paid in full at the first pay day thereafter; but no such man can be employed again without the consent of either superintendent.

To make the payments of June, the President, Wm. D. Griswold, raised \$50,000 on his individual credit; and to make the payments of the present month has raised \$35,000 on the same security. The road is surely emerging from its embarrassments, as was clearly foreseen when the present upright and skillful management was secured.

The road received for traffic in June of this year, \$52,152, and in July, \$47,231, together \$99,383, against \$85,040 for the same months last year. This success is attributable in a great measure to the energy and efficiency of its very popular Master of Transportation, Capt. Beebe.

To its present heavy passenger business and universal popularity among all classes of

our citizens and the traveling public generally, the local ticket agent at this point, F. M. Colburn, Esq., has, by his tact, energy and business talent, contributed very largely, in which he has been most ably seconded by his polite and attentive assistant, Mr. E. R. Moffatt.—*St. Louis Evening Bulletin.*

ALABAMA AND FLORIDA R. R.

It affords us great pleasure to present to our readers the larger and more interesting portion of the above very able report of Col. Charles T. Pollard, of Montgomery, Ala. His exhibits of the condition and affairs of that portion of the road, (and the greater portion, too, being 115 miles,) shows beyond cavil or controversy, the gratifying fact, that our railroad, from Pensacola to Montgomery, can and will be completed, by the close of next year.

The President, (Col. P.) after detailing his operations in regard to the building, repairs, &c., proceeds to say:

Within the year, from 1st of July, 1858, to July, 1859, 22,528 passengers have been passed over the Road, and 19,038 bales of cotton.

The receipts have been—

From passengers.....	\$24,775 33
Freight and mail pay.....	34,654 84

Making a total of.....	\$59,430 17
The expenses have been.....	27,070 87

Leaving a net income of.....	\$22,359 30
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The Road to Greenville was only opened on the 1st day of June, and the above stated receipts are upon the working of an average throughout the year of only 27 miles of Road; the result, therefore, is very encouraging, and will warrant the expectation that the receipts for the coming year, to end on the 1st of July, 1860, will show a net income, after paying all expenses, of not less than \$60,000.

The accompanying report of the Chief Engineer, to which I call your attention, gives very full and interesting information in relation to that part of the Road now in use, and the outfit, and also as to the progress of the grading on the entire line of Road between Greenville and the Florida line. Upon reference to it, you will find that we have but 22 miles to complete the entire grading of our whole Road of 115 miles in length.

The most important and interesting part of the report to be made to you after the announcement that the grading of the Road is nearly done, will be, what are the means now under the control of the Company to purchase the iron, lay it down, increase the outfit, and complete and open the Road for use, and after the completion, what will be the financial condition of the Company, which I will now proceed to lay before you.

After the exhaustion of the assets available for the prosecution of the work, and which you will find stated in detail on page 5, of my last annual report, amounting to \$206,743.76, the Board had no other means available but the lands granted by Congress, and after mature deliberation, they finally concluded to issue \$550,000 of Bonds, and secure them by a mortgage on the lands, and a second mortgage on the Road.

Col. Pollard then exhibits the Resolutions adopted by the Directory, and the steps taken in pursuance thereof, to provide the necessary means for the completion and outfit of the entire 115 miles to the Florida line, and then proceed as follows:

In accordance with the directions given to me by these resolutions, I executed the mort-

gage and proceeded to issue the \$550,000 of 8 per cent. Bonds, which I have placed in the market for sale, and have great satisfaction in reporting to you that they have been favorably received, and that up to this time I have sold \$30,000 at par.

These bonds are safe and good beyond all doubt, offering to capitalists one of the very best investments that can be made in securities of this character. The total cost of Road and outfit, and the estimated value of lands, show an aggregate of three millions of dollars, which is pledged for the payment of one million of dollars of Bonds, maturing from 1863 to 1869. If our stockholders will aid the Board of Directors by their influence, and a speedy sale of these bonds can be made so that the whole amount may be made available as early as the 1st of July next, I have great confidence in seeing our connection with the Gulf completed by the close of the year 1860.

The Chief Engineer has, in compliance with my request, submitted the following estimate of the amount of money now required to complete the road

For graduation, masonry and bridging.....	\$97,500
Cross-ties for 75 miles.....	45,500
Laying 75 miles track.....	37,500
Depot building and water station.....	10,000
Turn tables, road-crossing, &c.....	5,500
Right of way yet to settle.....	4,000
Engineering and contingencies.....	17,000

Making a total of.....	\$230,000
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To which add cost of 6,000 tons iron rail, delivered at the Road at \$55 per ton.....	330,000
Spikes and plates at \$400 per mile.....	30,000
Add for increase in outfit cars and locomotives.....	60,000

Making a total of.....	\$630,000
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And to show your condition fully, add to this the amount of your floating debt over and above your assets.....	70,000
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And the sum of.....	\$700,000
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is now required to fully complete and equip your road with an effective outfit.

To meet this, you have for sale \$520,000 land mortgage Bonds, which will, no doubt, be sold at par.....	520,000
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And you will be left with a floating debt of.....	\$180,000
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and a bonded debt of \$1,000,000, with a first class Road of 115 miles in operation, having a complete outfit and a domain of 394,437 acres of land to be disposed of.

These lands have been estimated by some of your most intelligent stockholders, living on the line of the Road, and in the very midst of them, as worth an average of three dollars per acre. They will be disposed of in accordance with the instructions of the Board, as set forth in the resolutions of the 3d of May, and I have but little doubt if they are judiciously managed in accordance with the views of the Board of Directors, as set forth in the resolution referred to, the proceeds of these lands will, in due time, provide for the payment of your Bonded debt.

Upon completion of the Road, under the statement submitted to you, it will have cost, with the outfit, about.....	\$2,000,000
Which will have been provided for—	
By capital stock paid in.....	\$820,000
Bonds secured by mortgage of Road and lands.....	1,000,000
Floating debt.....	180,000
	\$2,000,000

So that if by their maturity your bonds can be provided for from the sale of the lands, each share of stock will be entitled to not less than an additional share derived as profits from the proceeds.

I have, as you will notice, said nothing of the income of the Road, although I have estimated the net receipts of this year at \$60,000. You have now outstanding \$450,000 of 8 per cent. Bonds, and a floating debt which may, by January, have to be increased to \$150,000;

the net income of the road will therefore have to be applied to the payment of the interest as it may become due, which I have great confidence it will provide for.

The receipts of July, 1858, were.....\$2,146 47
" " " 1859, show.....6,162 94

Giving an increase this year of.....4,016 47

So that if the increase in receipts for the remainder of the coming year should hold up as well as they have for the first month, the total receipts for the year will fully come up to my estimate, and, probably, exceed it, until the road is, therefore, completed, and our connections made with the Gulf. I deem it unsafe to rely upon the receipts to do more than provide promptly for the interest. But when completed, and having connection with both Pensacola and Mobile, I feel confident it will pay regular and remunerating dividends upon the stock.

It affords me great pleasure to report to you that the Alabama and Florida Railroad of Florida, is making good progress. They had, at the last advices, 13 miles of iron laid down, and expected, by October, to open the 21 mile station. I rely on their completing their road to the Alabama line by the 1st of April next, and deem it advisable to import only about 1600 tons of iron more through the Atlantic ports—contracting for the 4000 tons required to lay through Conecuh county, to be landed in Pensacola.

From the above, it will be seen that they are not only selling their bonds at par, but that the profits arising from that portion of the road built, and to be completed soon, will be amply sufficient to meet and pay the interest on the bonds.

Where was there ever a Railroad, being built, in a better, if as good, a financial condition?

The report concludes as follows:

On my recent visit to New York I purchased, upon favorable terms, 600 tons of American iron, which is now being shipped to Charleston, and every effort will be made to complete 9 miles more south of Greenville to the 52 mile station, by the 1st of November. I am now negotiating for 2000 tons Welsh iron, to be delivered, one half in Charleston, and the other half in Pensacola, between this and the 1st day of January. If this purchase is made, and the money can be obtained on the Bonds as needed, when you again assemble in convention, you will, no doubt, have one hundred miles of your road in operation.

So, our stockholders and citizens should use every effort that may be necessary, to enable the able and efficient President, Maj. Wm. H. Chase, of the Florida end of said Railroad, to be completed as speedily as possible, so as to be able to transport said iron to Alabama immediately on its arrival, and thereby throw no impediment in the way of the great work, which is to do so much for South, East, Middle and South Alabama, and West Florida.—Our road will then be a *paying road*, Pensacola the mart of commerce, the seat of manufactories, the abode of health, beauty and intelligence, the Venice of the Gulf.—*Pensacola Observer*.

PITTSBURGH, FORT WAYNE & CHICAGO—The special telegraph line built by the Western Union Co., for the Pittsburgh, Fort Wayne and Chicago Railroad Company, was finally completed, on Friday last, and, at 6 o'clock that evening was working, successfully throughout its entire length, of five hundred and sixty-seven miles, from Chicago to Pittsburgh.—This will be a great feature of that great Road.

(From DeBow's Review.)

WESTWARD THE STAR OF EMPIRE.

THE GREAT WESTERN VALLEY—ITS GROWTH OF POPULATION AND OF CITIES.

The westward movement of the Caucasian branch of the human family from the high plains of Asia, first over Europe, and thence, with swelling tide, pouring its multitudes into the New World, is the grandest phenomenon of history. What American can contemplate its results, as displayed before him, and as promised in the proximate future, without an emotion of pride and exultation?

Our nation has the great middle region of the best continent of the world, and our people are descendants from the most vigorous races. Western Europe, over-peopled, sends us her most energetic sons and daughters, in numbers augmenting with each succeeding decade. Asia is beginning to send forth a portion of her surplus population to our shores. Though of inferior race, the Eastern Asiatics are industrious and ingenious cultivators and artisans. A large influx of these laborers, though it may lower the average character of our people, will, it is hoped, in a greater degree elevate theirs; and thus, while adding to the wealth and power of a nation, do something toward the general amelioration of the race. While, then, we contemplate with patriotic pride the position which as a nation, we hold in the world's affairs, may we not indulge in pleasant anticipations of the near approach of the time, when the commercial and social heart of our Empire will occupy its natural place as the heart of the continent, near the centre of its natural capabilities?

New York has long been, and for some decades of years it will continue to be, the necessary chief focal point of our nation. But, in all respects, it is not the true heart. In its composition and dealings, it is almost as much foreign as American. Located on our eastern border, fronting the most commercial and the richest transatlantic nations, and of easy access to extensive portions of our Atlantic coast, it is the best point of exchange between foreign lands and our own, and for the cities of the sea border of our Republic. As Tyre, Alexandria, Genoa, Venice, Lisbon, and Amsterdam, in their best days, flourished as factors between foreigners and the people of the interior regions whose industries were represented in their markets, so New York grows rich as the chief agent in the exchange-commerce between the ocean shores and the interior regions of our Continent. As our numbers have swelled, since we became a nation, from three and a half millions to thirty millions, so New York, including Brooklyn and other suburbs, has increased in population and wealth still more rapidly, to wit: from twenty-five thousand to more than one million. While the nation has increased less than ten-fold, New York has grown more than four times ten-fold. In 1790 the city of New York contained thirty-three thousand, and the State of New York three hundred and forty thousand—the city having less than one-tenth of the people of the State.

Believing that this most prosperous of the Atlantic cities will be eclipsed in its greatness and glory by one or more of the interior cities of the great plain, we have selected it as the champion of the Atlantic border, to hold up its progress during the thirty years from 1820 to 1860, the most prosperous years of its existence, in comparison with the progress, during the same period, of the aggregated cities

and towns of the plain. The result of our investigation—the summing up, will be found in the following table. It will be seen that many of the items are put down in round numbers—no document being accessible or in existence to furnish the exact number of many of the new towns, in 1830. The estimate for 1860 may, in some instances, be above the figures which the census will furnish, but the over-estimate for 1830 is believed to be in a larger proportion to actual numbers at that time.—Making a liberal allowance for errors, the result of the aggregate can not be materially varied from that at which our figures bring us:

	1830.	1860 Est.	Increase.
New York, including Brooklyn and other suburbs.....	234,438.	1,170,000.	.5 times
Cities and chief towns of the great plain.....	270,094.	2,706,300.	10 " nearly

Leaving out the exterior cities of the plain, to wit: New Orleans, Mobile, Galveston, Quebec, and Montreal, the comparison between New York and suburbs, and the interior cities of the plain will be shown by the following figures:

	1830.	1860 Est.	Increase
New York and accessories.....	234,448.	1,170,000.	.5 fold
Interior cities and towns of the plain.....	172,000.	2,346,000.	.13 "

The five largest cities of the Atlantic border exhibit a growth, as compared with the five largest cities of the plain, as follows:

	1830.	1860 Est.
New York and dependencies.....	235,000.	1,170,000
Philadelphia ".....	170,000.	700,000
Baltimore ".....	83,000.	250,000
Boston ".....	80,000.	200,000
Charleston ".....	31,000.	60,000

	1830.	1860 Est.
Cincinnati and suburbs.....	28,000.	250,000
New Orleans ".....	47,000.	170,000
St. Louis ".....	6,000.	170,000
Chicago ".....	100.	150,000
Pittsburgh ".....	17,000.	145,000
	98,100.	885,000

This table shows the five Atlantic cities to have quadrupled, and the five cities of the interior plain to have increased nine times.—Is this relative rate of increase of the exterior and interior cities to be changed, and, if it is to be changed, when is the change to commence? We can foresee no cause adequate to that effect, or tending toward it. On the contrary, it seems to us certain as any future event, that the rate of growth of the interior cities, compared with those on the Atlantic border, will be increased.

The proportion which their present numbers bear to the numbers of the rural population does not exceed one to six, whereas the urban population of the Atlantic border is not less than one to three of the rural. This disproportion of city and rural population will hereafter change more rapidly in favor of the interior than the Atlantic cities, because of the greater fertility of soil producing more food from an equal amount of labor; and, also, by reason of the more rapid growth of the general population, of which an increasing proportion will prefer city to country life. Will it not be so? Will not the general increase of population be greater in the interior States? Will not the productions of the soil increase faster? And can there be a doubt that the large disproportion in the distribution of the population between city and country, in the interior, will be lessened, so that, instead of being, as now, only one to five or six, they will rapidly approach the proportion of one to two or three? Here, then, are the sources of superior increase so obviously true, as to need only to be stated to insure conviction.

Let us now compare the growth, for the

thirty years since 1830, of the five largest Atlantic cities, with the five largest cities of the plain, and, by its side, extend the comparison to 10, 15, and 20 of the largest cities of each section:

	1830.	1860 Est.
New York and accessories.....	235,000	1,170,000
Philadelphia.....	170,000	700,000
Baltimore.....	83,000	250,000
Boston.....	80,000	200,000
Charleston.....	31,000	60,000
	599,000	2,380,000
	Increase 4 times.	
	1830.	1860 Est.
Cincinnati and suburbs.....	28,000	250,000
New Orleans.....	47,000	270,000
St. Louis.....	6,000	170,000
Chicago.....	100	150,000
Pittsburgh.....	17,000	145,000
	98,000	825,000
	Increase 9 times.	

Let us now compare the ten largest of each section:

		Atlantic.	
		1830.	1860 Est.
The aggregate of the five largest as above.....		579,000.....	2,370,000
Providence.....		17,000.....	55,000
Lowell.....		6,500.....	40,000
Washington.....		19,000.....	60,000
Albany.....		24,000.....	65,000
Richmond.....		16,000.....	35,000
		661,000.....	2,625,000
		Increase 4 times.	
Interior.			
		1830.	1860 Est.
Aggregate as above.....		98,000.....	885,000
Buffalo.....		9,000.....	100,000
Louisville.....		10,500.....	80,000
Milwaukee.....		50.....	75,000
Detroit.....		2,000.....	80,000
Cleveland.....		1,000.....	70,000
		120,550.....	1,290,000
		Increase 10 7-10 times.	

Aggregate of the ten, with five more of each section added, to wit:

	1830.	1860 Est.
Aggregate as above.....	661,000	2,625,000
Troy.....	11,500	35,000
Portland.....	12,500	30,000
Salem.....	14,000	25,000
New Haven.....	10,000	30,000
Savannah.....	7,500	15,500
	716,500	2,760,500
	Increase 3 8-10 times.	
	1830.	1860 Est.
Aggregate as above.....	120,550	1,290,000
Toronto.....	1,700	65,000
Rochester.....	9,000	50,000
Mobile.....	3,000	30,000
Memphis.....	1,500	25,000
Hamilton.....	1,500	25,000
	137,250	1,485,000
	Increase 10 7-10 times.	

Aggregate of the fifteen, with five more added in each section:

	1830.	1860 Est.
Aggregate as above.....	716,500	2,760,500
Springfield, Mass.....	7,000	24,000
Worcester.....	4,500	24,000
Bangor, Me.....	3,000	23,000
Patterson, N. J.....	5,000	22,000
Manchester, N. H.....	50	22,000
	736,050	2,875,500
	Increase 3 8-10 times.	
	1830.	1860 Est.
Aggregate as above.....	137,250	1,485,000
Dyton.....	3,000	24,000
Indianapolis.....	1,500	22,000
Toledo.....	30	20,000
Oswego.....	3,200	20,000
Quincy.....	1,500	20,000
	149,700	1,591,000
	Increase 10 6-10 times.	

From the above tables, we see that the city of New York, with its neighboring dependencies, will have made in growth in thirty years, between 1830 and 1860, increasing its population 5 times. During the same period

The 5 largest Atlantic cities and suburbs, including New York, increased..... 4 1-10 times
The 10 largest Atlantic cities and suburbs, including New York, increased..... 4 "
The 15 largest Atlantic cities and suburbs, including New York, increased..... 3 8-10 "
The 20 largest Atlantic cities and suburbs, including New York, increased..... 3 8-10 "

And that the 5 largest cities of the great plain, during the same period, increased..... 9 "
And the 10 largest cities of the great plain, during the same period, increased..... 10 7-10 "
And the 15 largest cities of the great plain, during the same period, increased..... 10 7-10 "
And the 20 largest cities of the great plain, during the same period, increased..... 10 6-10 "

If the number of cities and towns of each section were increased to twenty-five, thirty, and thirty-five of each section, the disparity would increase in favor of the interior cities, most of these to be brought into the comparison, having come into existence since 1830.

We commend the comparison between the old and the new cities, so far back as 1830, to give the former a better chance for a fair showing. If a later census should be chosen for a starting point, the advantages would be more decidedly with the interior cities.

In the article on the great plain, in the May number of this Review, we gave prominence to the two great external gateways of commerce offered to its people in their intercourse with the rest of the world: that is to say, the Mississippi river entrance into the Gulf of Mexico, and the outlet of the lakes through St. Lawrence and Hudson rivers. These constitute the present great routes of commerce of the people of the plain, and draw to the cities on the borders of the great lakes and rivers the trade of the surrounding country. Between the cities of the great rivers and lakes there has, of late, sprang up a friendly rivalry, each having some peculiar advantages, and all, in some degree, drawing business into their laps for the benefit of their rivals. That is to say: river cities gather in productions from the surrounding districts which seek an eastern market through lake harbors; and lake cities perform the same office for the chief river cities. Each year increases, to a marked extent, the intercourse which these two classes of cities hold with each other; and it may be safely anticipated that no long period will elapse before this intercourse will become more important to them than all their commerce with the world beside.

In comparing the interior cities of the great plain, situated on the navigable rivers, with those located on the borders of the lakes, two considerations bearing on their relative growth should be kept in view. The river cities were of earlier growth, the settlement from the Atlantic States having taken the Ohio river as the high-road to their new homes, many years before the upper lakes were resorted to as a channel of active emigration. This gave an earlier development to the country bordering the central rivers, the Ohio, Wabash, Illinois, and Lower Missouri. The States of Kentucky and Tennessee, also, had been pretty well settled, in their more inviting portions, before any considerable inroad had been made on the wilderness bordering on the upper lakes. Owing to these and other circumstances, the river cities, Pittsburgh, Cincinnati, Louisville, and others of less note, were well advanced in growth, before the towns on the upper lakes had begun, in any considerable degree, to be developed. Another advantage the river cities possessed in their early stage, and which they still hold: that of manufacturing for the planting States bordering the great rivers. For many years, in a great variety of articles of necessity, they possessed almost a monopoly of this business. Of late, transportation has become so cheap, that the planters avail them-

selves of a greater range of choice for the purchase of manufactured articles, and the lake cities have commenced a direct trade with the plantation States, which will doubtless increase with the usual rapidity of industrial development in the fertile west.

If we claim for the upper lake country some superiority of climate for city growth over the great river region, we do not doubt that the future will justify the claim. More labor will be performed for the same compensation, in a cool, bracing atmosphere, such as distinguishes the upper lake region, than on the more sultry banks of the central affluents of the Mississippi, where are the best positions for the chief river cities.

(TO BE CONTINUED.)

RAILROAD FROM ST. LOUIS TO NASHVILLE, TENN.

St. Louis enjoys a very direct railroad connection with the capitals of Illinois and Indiana, and also through Louisville, with the capitol of Kentucky. By the North Missouri R. R., our city will enjoy, at no distant day, a direct railroad communication with Des Moines, the capital of Iowa.

We shall, undoubtedly, possess like easy access by the Pacific road, to the capital of Kansas.

It remains only that St. Louis look for railroad connection with the capitals of Tennessee and Arkansas. This we shall obtain, ultimately, by the Iron Mountain Railroad. The citizens of Nashville, Tennessee, are already manifesting a proper interest in this subject. They have at Nashville, what they call a *North-western* Railroad. It will connect Nashville with the Mississippi river at Hickman, Ky., and form part of a very direct road from Nashville toward St. Louis, Missouri. If the Iron Mountain Railroad should be continued southwardly, and touch the Mississippi river opposite Hickman, St. Louis will have an admirable connection, mostly over Mississippi soil, with the splendid railroad system of Tennessee. The Nashville (Tenn.) *Banner* is discussing this project favorably, as follows:

The building of the Northwestern road promises, also, to bring us in immediate connection with St. Louis by the connection with the Iron Mountain road. We stated the other day, upon the authority of a letter from a reliable gentleman at Hickman, that the Directory of the latter road, after a careful canvassing of the claims of Cairo and Hickman for a terminus, had selected Hickman. Whether this information turns out correct or not, it is evidently to the interest of that road to make the connection at the point indicated. We notice that our enterprising fellow citizens of Memphis, always alive to every opportunity to enhance the growth and prosperity of their thriving city, are moving with their accustomed alacrity to secure the termination of the Iron Mountain road at Hopewell, a point opposite Memphis, in Arkansas. But we cannot but believe that this project will not conserve the interest of the people of St. Louis. The superior advantages of Hickman as a terminus are too apparent. The Northwestern road will meet it upon the very bank of the Mississippi. Once in connection with the Northwestern road, the connections which it offers are superior to anything that can be obtained by any other union. Through passenger and freight tickets can be given from St. Louis by the Northwestern road into all the Southern States, via the Mobile and Ohio road, New Orleans and Northern, and Mississippi Central, and from this city through arrangements are

already made to receipt for freight deliverable in any part of Virginia, Carolina, Georgia and Alabama. The same will be true of Kentucky, by both the Kentucky roads. Add to this the advantage alluded to in the outset, viz: the perfect connection of all our roads here saving the expense of reshipment, drayage, commission, storage, &c., of freight, and carriage hire for passengers, it will be seen that we offer the St. Louis people superior inducements.—The roads terminating at Memphis do not connect, the depots are all some distance apart, and some remote from the river, and it was stated and substantiated, as we learn by Col. Stevenson, during his recent canvass of Carroll county, that it costs as much to get freight through the city of Memphis as it does to get it there by river from New Orleans, St. Louis, or Louisville. This is an important item, and of itself will constrain the Directory of the St. Louis road to avoid the Hopewell connection.

We, however, would be far from detracting anything from the increasing importance of our sister city of Memphis. But we regard this Hickman connection with St. Louis as one of vast importance to Nashville and Middle Tennessee, and we therefore present these suggestions upon the subject. We trust that the report that Hickman has been selected will be verified. We recommend, if the question is not finally settled, that the Directory of the Northwestern road and our citizens generally, take some measures at once to secure its settlement in favor of Hickman. No time should be lost. The rival claimants are active and untiring, and nothing but enterprise and promptness will win the race in these go-ahead times.—*Even. News.*

DETROIT AND MILWAUKEE R. R.

A correspondent of the Milwaukee *Sentinel*, who attended the recent excursion over the above road, says:

"The energetic managers of this route are pushing rapidly to completion the structures which are to make Grand Haven safe and easy of access; the south bridge being already built out a thousand feet into the Lake. When these works are finished—as they will be in a few months—no harbor on the Lakes will equal that at the mouth of Grand River. Inside, the water is deep; the space ample; the facilities for receiving and discharging cargoes, all that could be asked; and the stormy winds are effectually barred out by high sand banks, covered with timber. Outside, there is plenty of water up to the bar, and for all ordinary craft, enough there even now; while the improvements in progress will soon render the harbor accessible at all seasons of the year, to the largest craft that navigate our Lakes.

The work will cost the Railroad Company a quarter of a million of dollars, and they have only done what the Federal Government has left undone.

Our train from Grand Haven, on Tuesday evening, was quite a large one; but the "sleeping car" offered tempting inducements to those who sought for rest; and many of us were "shelved," sound asleep, and a few snoring, before we had reached the flourishing town of Grand Rapids. The ride by night was a swift, smooth and pleasant one, and early morning found us at Detroit. Those of us who were going no farther, but had come to the "City of the Straits" to meet the new steamers of the D. & M. R. R. route, speedily found good quarters, cordial welcome, and a palatable break-

fast at the Biddle House, very conveniently located within two squares of the depot of the Detroit and Milwaukee R. R. Company. Soon after 8 o'clock it was announced that the steamers were coming; and we lost no time in repairing to the extensive and substantial wharf of the D. & M. R. R. to see the *Detroit* and *Milwaukee* come up the peerless Detroit river. No sooner had the roar of artillery apprised the people of the approach of the steamers and their Eastern guests, than all Detroit and a small representation from Milwaukee, turned out to meet them.

The two steamers came up together, with guns firing, colors displayed, and multitudes on shore, enchanted with the look of the boats. They are, indeed, magnificent steamers, staunch, sea-worthy and admirably adapted to the business for which they were built. Every department about them is well officered, with the "right men in the right place," and to-day I heard nothing but expressions of delight, at the perfection of the boats and the selection of the officers."

THE NEW RAILROAD ROUTE TO THE WEST.

The New York *Times* learns that Mr. Cullen, President of the Reading Railroad, has consented to enter in an arrangement with the roads connecting with his own, and that in a few days through passenger and freight trains will be running over his Lebanon Valley Branch, and East Pennsylvania Railroad, from Jersey City and Elizabethport, to all points in the west and south-west. The *Times* adds:

This is a new route, and certainly a very important one to New York. It is one hundred and forty-five miles nearer to Cincinnati and St. Louis by this route than by either the New York Central or Erie, and two hundred and seventy-six miles nearer to Cleveland and Chicago and points west thereof. Over it passengers may be taken to the far west and south-west without change of cars, and freight can be locked up in the cars at Jersey City or Elizabethport, and landed at Cincinnati, St. Louis, Cleveland, Chicago and Iowa City without break of bulk or transshipment.

As this new route will be open in a few days for through business, we shall very soon see what effect it will have upon our two great New York lines, the Central and Erie. Being shorter to the west and south-west than either of them, and over which passengers can be carried without change of cars, and freight without transshipment, it must become a favorite route. In winter, when these more northern routes are more or less blocked up, as they often are, this new line will be clear from such obstructions.

The business of the Philadelphia and Reading Railroad for the month of July, 1859 and 1858, is as follows:

	1859.	1858.
Received from Coal.....	\$184,295 60	\$216,448 81
" " Merchandise.....	29,804 60	23,612 88
" " Travel, etc.....	34,761 52	27,392 85
	\$248,861 72	257,454 64
Transportation, roadway, renewal fund, and all charges.....	127,803 87	180,267 57
Net profit for the month.....	121,057 85	127,187 07
Net profit for previous 7 months..	614,810 21	519,353 43
Total net profits for 8 months....	735,868 06	646,540 50

The whole amount received for tolls upon the New York State Canals from the opening of navigation in 1859 to August 13th, were.....\$ 794,999 08
For the same time last year.....1,048,633 76
Decrease.....\$263,634 86

MONETARY AND COMMERCIAL.

There has been no material change in money matters since our last issue. With the increase of business there has been a slight increase in the demand for money, which has, however, been promptly met by the regular discount houses to their customers at the customary rates, viz: 9 to 12 per cent. The outside offerings are about the same as the week previous, and are done at 12@18 per cent.

There is a full supply of Eastern Exchange at our previously quoted rates. The following are the quotations:

	BUYING.	SELLING.
New York Sight.....	40@45 prem.	40@45 prem.
Boston.....	37@40 prem.	37@40 prem.
Philadelphia.....	40@45 prem.	40@45 prem.
Baltimore.....	37@40 prem.	37@40 prem.
New Orleans.....	1/4 dis.	par.
American Gold....	35@40 prem.	1/4 prem.

The N. Y. *Courier and Enquirer*, relative to money matters at the east, says:

The supply of money is more ample than at the close of August. We hear of occasional transactions at 5 per cent. on call, but they are special cases, very little being done under 6 per cent., and the larger portion at 7.

The Bank statement for the past week shows an increasing volume of specie. Six of the Banks report over a million each on hand, and \$7,800,000 in the aggregate. Three report over 40 per cent. of liabilities in specie, seven have over 30 per cent., and nineteen report over 25 per cent. We refer to another column for a careful summary of each. The changes for the week are as follows:

In Loans, an increase of.....	\$643,000
In Specie, an increase of.....	750,000
In Circulation, an increase of.....	139,000
In Deposits, an increase of.....	1,363,000

The following will show the total value of dry goods imported at New York for 8 months of 1859, compared with the same months of the two preceding years:

	1857.	1858.	1859.
January.....	\$10,336,479	2,858,234	10,575,587
February.....	12,497,612	5,538,793	10,516,205
March.....	9,118,971	5,518,415	10,561,961

First Quarter.....	\$32,003,060	13,935,472	31,653,752
April.....	5,951,360	2,644,879	8,046,718
May.....	3,226,419	3,154,816	8,104,469
June.....	4,583,941	2,801,673	8,165,037

Second Quarter.....	\$13,771,680	8,600,353	24,309,163
July.....	18,128,115	7,599,739	15,817,091
Aug.....	10,949,752	11,535,645	15,176,907

Total 8 months.....	\$74,852,610	41,691,214	86,956,914
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The exchanges to-day at the Clearing House included the heavy payments maturing on the 3d and 4th inst., and amounted to \$23,588,290, being 3 1/2 millions in excess of the average of last week.

There is not any material change in prices in the Stock Market to-day, but the feeling is better, and, in some cases, 1/2 to 1 advance was paid. Michigan Southern preferred was the leading stock, with a greater advance than any other share. State stocks, which were dull on Saturday, are more active to-day. Missouri sixes, \$67,000 sold at 84 1/2 advance. Tennessee sixes advanced 1/2. U. S. fives, 1874, sold at 105 1/2, the former price. Erie, 4th mortgage, improved 1. Michigan Southern sinking fund bonds declined 3 to 4, closing at 51 1/2. Pacific Mail improved 1/2. N. Y. Central shares advanced 1/2, closing at 76 1/2. Reading advanced 1/2. Cleveland and Toledo 1/2. Galena and Chicago 1/2. Chicago and Rock Island 1/2. Michigan Southern advanced 1/2, closing at 26.

At the Second Board the sales were unusually light, resulted in an advance of 1/2 in Missouri sixes, compared with Saturday's closing cash rates; N. Y. Centr-1 shares 1/2, Reading 1/2; Mich. Central, 1/2; Mich. Southern, 1/2; Cleve and Tol. 1/2; Chicago and Rock Island, 1/2. There were no sales of Virginia Bonds, Panama Railroad Shares, Illinois Central Bonds, Delaware and Hudson, or Pennsylvania Coal Company Shares. North Carolina Sixes sold at 97 1/2; Tennessee, 89.

We annex the closing cash rates for the past four days, at the regular Board Sales:

	Sept.	1st.	2d.	3d.	5th.
U. S. fives 1873-4.....	103	103 1/2	..	..	103 1/2
Virginia sixes.....	84	94	94 1/2	..	..
Missouri sixes.....	83 1/2	84	84 1/2	84 1/2	84 1/2
N. Y. Cent. shares.....	75 1/2	77	76 1/2	76 1/2	76 1/2
N. Y. & Erie shares.....	..	..	..	..	..
Reading R. R. shares.....	43 1/2	44	43 1/2	43 1/2	43 1/2
Mich. Cent.....	47 1/2	47 1/2	46	46 1/2	46 1/2
Mich. South. Pref.....	26	25 1/2	25 1/2	25 1/2	25 1/2
Clev. & Tol. shares.....	25 1/2	25 1/2	24 1/2	25 1/2	25 1/2
Panama R. R. shares.....	117	117 1/2	117 1/2	..	..
Illinois Central shares.....	67	67	66 1/2	66 1/2	66 1/2
Illinois Central bonds.....	..	..	..	..	..
Chicago & R. I. shares.....	69 1/2	69 1/2	67 1/2	68	68
Galena and Chicago R. R. 7 1/2	72 1/2	72 1/2	71 1/2	71 1/2	71 1/2
Del. & Hud. Canal.....	..	..	..	..	..
Cumberland Canal Co.....	14 1/2	..	..	..	14
Penn. Coal Co.....	..	..	8 1/2	8 1/2	8 1/2
Pacific Mail SS Co.....	85	86	85 1/2	85 1/2	86

UNION OF THE EAST AND WEST LINES.

CONSOLIDATION OF THE EARNINGS OF THE LITTLE MIAMI AND COLUMBUS AND XENIA COMPANIES WITH THOSE OF THE CINCINNATI, HAMILTON AND DAYTON.

On yesterday a contract for the division of the receipts of the two Miami lines, was consummated. The gross earnings of the Cincinnati, Hamilton and Dayton Road, sixty miles, and those of the Little Miami and the Columbus and Xenia, one hundred and twenty miles, go to the formation of a common fund, from which fifty per cent. is to be deducted for the working expenses of each line; of the balance the East line—Cincinnati, Xenia and Columbus—takes seventy per cent., and the west line—Cincinnati, Hamilton and Dayton—takes thirty per cent. The contract, which was concluded at the Burnet House on yesterday, is for twenty years, but at the end of five years either party may withdraw upon giving one year's notice of a desire to dissolve the connection.

This union of the leading, and at present, controlling roads of the Ohio Valley is one of great importance. It is to be hoped that the Proprietary of the united roads will appreciate, fully, the delicacy of their position before the public. To sustain remunerative rates is legitimate, and there is no good reason for supposing that the Directors of the now virtually consolidated interests will undertake to grasp more. The public will, however, reflect that there are powerful checks upon any tendency to the exaction of unreasonably high rates by the united roads. The Ohio River, the Marietta and Cincinnati, and Indianapolis and Cincinnati, afford facilities for transportation to the seaboard—the former by the Southern route and the latter by the Lakes and the Canadian system of roads. During the last winter, with all the keen competition for freights, the Indianapolis and Cincinnati carried considerable quantities of lard and meats for Montreal by the way Toledo and Detroit. The Marietta and Cincinnati has a right to the joint use of the Little Miami track for nearly eighteen months yet, and in the mean time may be able, by some union with the Dayton and Michigan—now a power in the railroad world, and the proximate cause of this union of the two Miami Lines—and the Cincinnati, Wilmington and Zanesville, to secure an independent entrance to the heart of this city.

We think it as safe, as it is courteous, to predict that the managers of the United roads will give the public no substantial grounds to regret the vast aggregation of power gathered into a few hands by the contract of Union between the East and West.—*Cincinnati Commercial*, Sept. 3, 1859.

MOSELEY'S WROUGHT IRON ARCH BRIDGES

—AND—
Corrugated Iron Roofs.
ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.
Spt. 2. MOSELEY & CO.

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANA OR SANDOVAL

FOR

Decatur, Springfield,
Bloomington, Peoria,
Burlington, Quincy,
La Salle, Rock Island,
Dixon, Galena,
Prairie du Chien, St. Paul, and
St. Anthony.
And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANA for all the above points. Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,

Gen'l Southern Agent, Cincinnati.

W. P. JOHNSON,

Gen'l Passenger Agent, Chicago.

RECEIVER'S SALE.

BY virtue of a Judgment of the Court of Common Pleas of Muskingum County, Ohio, rendered in a certain case therein pending, in which the "Clinton Bank of Columbus is Plaintiff, and Douglas, Smith & Co., and others, are Defendants, I will offer for sale, at the Court House, in the City of Zanesville, in the said Muskingum County, at the hour of one o'clock, in the afternoon, on the 13th day of September next, the following described parcels of land, situate in the Western Addition to the said City of Zanesville, as the same is designated and delineated upon the plat of said addition, recorded in the Recorder's office, of said county, in the Record of Plats, Book No. 1, page 13, &c.; that is to say, Lots Nos. 1, 2 and 3, of square 17, in said "Western Addition," appraised at \$150 each. Lots Nos. 4, 5 and 6, of said square 17, together with the strip of land between the south-eastern ends of the said lots, and lots Nos. 10, 11 and 12, in the said square, said strip of land being about 16 feet wide, with the buildings erected on the said lots and strip of land, and the fixtures and appurtenances thereunto belonging, appraised at the sum of \$6,500.—There are erected on the said lots, a brick shop, for the manufacture of passenger cars, 120 feet by 50 feet, roofed with slate, and also a wood car shop, 120 by 40 feet; steam engine and Boilers; 2 Daniels' Planing Machines; 1 upright saw; 1 Turning Lathe, Shafts, Cones, Pulleys, Hangers, &c., connected with said machinery.

Lots Nos. 7, 8, 9, 10, 11 and 12, of said 17th square, with the buildings erected thereon, and the fixtures and appurtenances thereunto belonging, appraised at \$7,000. There are erected on said parcels, a Brick Machine Shop, 80 feet by 40 feet; a Forge Shop, 40 feet by 40 feet, containing 8 forges; a Carpenter Shop, 120 feet by 26 feet. Foundry buildings, one Lathe, 6 feet swing; 1 Boring Machine; 1 large Screw Cutting Machine; 1 Planing Machine; 3 Hand Lathes; 1 large Drill Press; 2 small Drill Presses; 1 wheel press; 1 Foundry Fan; 2 Screw Cutting Machines; 1 small Drill Press; Shafts, Pulleys, &c., used with said machinery.

Lots Nos. 1, 2, 3, 7, 8, 9, 10 and 11, of square 21, in said Western Addition, appraised at \$150 each.

Lot No. 4, in said square 21, on which is erected small dwelling house, appraised at \$350.

Lots Nos. 5 and 6, in said square 21, with the buildings thereon, and the fixtures and appurtenances thereunto belonging, appraised at \$800, on which lots is erected a large Foundry building, with Crane, Cones, &c.

Lot No. 12, in said square 21, on which is erected a stable, appraised at \$250.

Lots Nos. 1, 2, 3 and 4, in square 16, in said Western Addition, on which is erected a large frame building, appraised at \$1,000.

Lots Nos. 5, 7 and 8, in said square 16, appraised at \$150 each.

Lot No. 6, in said square 16, appraised at \$175.

The said parcels of land are situated on the line of the Central Ohio Railroad Company, on the west side of the Muskingum River, and immediately opposite the city of Zanesville, and formerly occupied, in part, by the Machine Shops, Foundry, Car Manufactory, &c., of Douglas, Smith & Co., known as the "Muskingum Works." The "works" are well arranged and convenient, and have capacity for a force of from 100 to 150 men. The location is healthy, and the facilities for procuring pig iron, coal, &c., &c., render the location one admirably adapted for such "works." Terms Cash.

And I will also, on the 14th day of September, 1859, at one o'clock, P. M., at the said "Muskingum Works," offer for sale the following personal property used in said "works," to wit:

2 Axle Lathes, 22 inch swing; 1 Axle Lathe, 26 inch swing; 1 Slide Lathe, 20 inch swing; 1 Slide Lathe, 15 inch swing; 1 Slotting Machine; 1 small Slide Lathe; 2 Slide Rests; 1 Grind-stone, with shafts and fixtures; 8 Blacksmith vices, work benches and clamps; 1 Screw Cutting Machine, No. 40; 12 large Anvils; 13 sets Blacksmith Tools; 2 Ripping Saws; 1 Cut-off Saw; 1 large and 1 small Tenoning Machine; 1 Tongue and Grooving Machine; 1 Mortising and 1 Boring Machine; 1 Caul.

Terms Cash.

JOHN TAYLOR, Jr., Receiver.

Aug. 4, 15

June 21, 1859.

Cincinnati, Hamilton and Dayton



RAILROAD.

FOUR TRAINS

LEAVE THE SIXTH STREET DEPOT DAILY.

TRAINS RUN THROUGH TO RICHMOND, LIMA, SANDUSKY, AND DELAWARE WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND NORTH-WESTERN CITIES.

(Columbus time, which is seven minutes faster than Cincinnati.)

6 A. M. EXPRESS TRAIN—For Cleveland and Pittsburgh, via Delaware, makes close connection at Crestline for Pittsburg, Baltimore, Philadelphia, and New York; and at Cleveland for Dunkirk, Buffalo, Boston and New York. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 7:30 P. M., Quincy and Galena at 7 A. M. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Munice. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

8 A. M. MAIL TRAIN—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STEAMER FOR DETROIT; at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at Delaware with the C., C. and O. Road, for Cleveland and points East. Also connects with Junction Railroad at Hamilton for Oxford.

4:30 P. M. TRAIN—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Also, connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago. Also connects with Junction Railroad at Hamilton for Oxford.

6 P. M. TRAIN—For Dayton, Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 8 A. M.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; at the new Ticket Office on West side of Vine street, between the Post Office and the Burnet House; or at the Sixth Street Depot.

D. McLAREN, Superintendent.

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; and lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circular which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the retort is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet,.....	\$300 00
do do 350 "	335 00
do do 400 "	375 00
do do 500 "	450 00
do do 600 "	525 00
do do 700 "	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, as now in operation in several States, apply to

R. T. COVERDALE,

167 Walnut Street, Cincinnati, Ohio, who has the exclusive right to manufacture and sell in the State of Ohio.

Feb. 24th, 1859.

APPLEGATE & CO.,
Booksellers, Publishers, Stationers & Blank
Book Manufacturers,
43 Main St. Cincinnati, O.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Booksellers, Country merchants, and others to extensive stock of School, Classical, Theological, Standard, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the principal publishers and importers of Paper and Stationery, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

BOOKSELLERS,

Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, Envelope, Manilla and Tea wrap-boards, Envelopes, Gold & steel Pens, Penholders, Copying Books, Ink and saucers, Sealing Slates, Mutilage, Book rests, Bill envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files: Date Calendars, together with all other articles used in the counting-house.

'Stationers,

To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly pegged, including all sizes, from the large memorandum book to the small Imperial Ledger, and variety of styles workmanship, order of any design, with or without printed headings, and warranted in quality of paper, ruling and durability of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

BLANK BOOK MANUFACTURERS,

We are prepared to Print and Bind books in any style desired, at rates as low as quality of work cut in this where. Our executing these branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Cards, Circulars, or any other description of printing, will find that we do such jobs despatch. Orders re-

Stereotype, of any description that may be desired, can be executed or else facilities for branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Cards, Circulars, or any other description of printing, will find that we do such jobs despatch. Orders re-

Publishers,

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, Clark's Compendium, Lin's Ancient History, Plutarch's Lives, Josephus, Spectator, Chain of Sacred Wonders, Familiar Science, Webb's Monitor, Soden's German, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, Books of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

3 MAIN STREET CIN.

W. HARVEY'S SAFETY JOINT For Coupling the Ends of "T" Rails. PATENTED, NOV. 2, 1858.

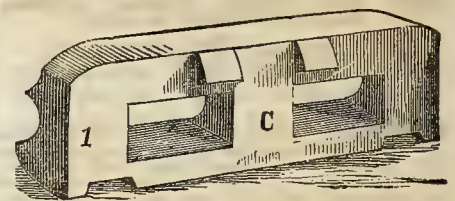


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outside side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

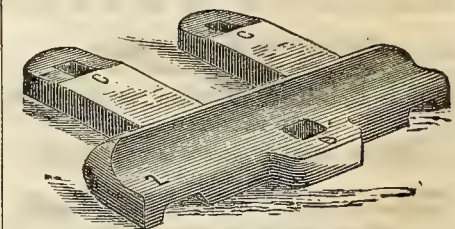
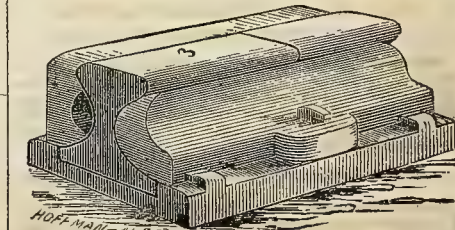


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that one part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly free road, thereby doing away with the breaking of rails, wheels, and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear of the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
41 Jefferson-street, Albany, N. Y.
T. WRIGHTSON, AGENT, Cincinnati, O.

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

SOLE IMPORTERS.
PROSSER'S PATENT SURFACE CONDENSERS for high pressure steam, with sea or other bad boiler water, gauges, 3-cutter drills, counter-sinks, tube end cutting bars, expanders, tube scalers, steel wire and whalebone brushes, pall lever wrenches, tubes—plain or enameled, screwed together for Artesian Wells, Hollow Slabs for various purposes, Steel for Rollers.

THOS. PROSSER & SON,
27 Jan. 28 Platt Street, New York.

G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

BUSH & LOBDELL, Wilmington - - - - - Delaware

MANUFACTURERS OF
CHILLED WHEELS

AND
TIRES,
For R. R. Cars & Locomotive Engines,
ARE PREPARED TO

Execute Promptly Orders to any Extent
FOR THEIR
CELEBRATED WHEELS,
EITHER SINGLE OR DOUBLE PLATE,
WITH OR WITHOUT AXLES.

WHEELS FITTED
To Hammered or Rolled Axles.
In the best manner, at the shortest notice, and on the
Most Reasonable Terms.

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A Book for Every Business Man!
JUST PUBLISHED

—THE—
POST-OFFICE GUIDE!
For Post-Masters and Business Men.
CONTAINING

A Complete List of Post-Offices in the United States and Territories, arranged by States and Counties; A Complete List of all Distributing Post-Offices; Rates of Foreign and Domestic Letter Postage; Rates of Printed Matter, Transient and Regular; Abstract of the Laws and Regulations of the Post-Office Department, &c., &c.

COMPILED BY E. PENROSE JONES,
Late Assistant Post-Master at Cincinnati.
Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.
U. S. BLANK AGENCY, CINCINNATI POST-OFFICE,
January, 1859.

This work has been carefully compiled and corrected by E. PENROSE JONES, Esq., late Assistant Post-Master of the Cincinnati P. O., from the Records in this Department, and other sources, and contains the most complete list of Post-Offices, especially of the Western, North-Western, and South-Western States, yet published.

MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an active pamphlet of about 100 pages. The entire matter is kept standing in type, and as the compiler is promptly advised of all New Offices, Changes and Regulations of the Department, the information is corrected up to the last day of publication, an advantage possessed by no other work of the kind.

OBSERVE, That this list is arranged by States and Counties, making it especially valuable to business men. No similar arrangement has been published since 1856. There are 3000 more offices in this than in any book heretofore issued. The Price is one-half that of any work of the kind now published.

If Single copies sent by mail (postage prepaid) to any address, upon receiving Twenty-five Cents in Silver or Postage Stamps. Five Copies sent for \$1.00, or Twelve Copies for \$2.00.

Address,
C. S. WILLIAMS,
194 Walnut Street,
Cincinnati, Ohio.

WHEELER & WILSON'S



SEWIN G MACHINES.

WM. SUMNER & CO., cor. Fourth and Walnut Streets, second floor, Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky., Columbus, O.,
Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being ALIKE ON BOTH SIDES, impossible to ravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions, free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

Send or call for a circular, containing all particulars, prices, testimonials, etc.
feb12.

WM. SUMNER & CO.

1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th Corby, Gossin & Co.'s make, for sale very low by
TRABER & AUBERY,
7 Public Landing

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action
SUCTION & FORCE PUMP

AND
Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect— are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.
Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded for the McGowan's Patent Ball Valve Pump at the late Fair of the Ohio Mechanics' Institute. June 18, 1855—1

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co., Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase
Ag 4, m.6.

FREEDOM IRON COMPANY,

MANUFACTURERS OF

LOCOMOTIVE TYRE,
Engine and Car Axles, Pump and Piston Rods,
Bar of all Sizes,
And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't.

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works. June 9.

New Time Table

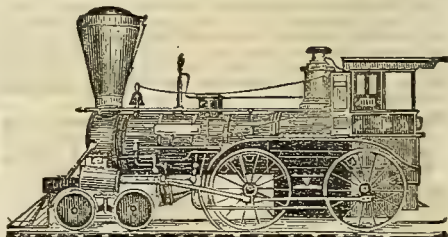
OF THE

NEW YORK CENTRAL R. R.



	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp.	7 00 A. M.	7 00 P. M.	7 00 P. M.
Mail	9 00 A. M.	12 50 A. M.	
New York Exp.	11 15 A. M.	9 00 P. M.	9 00 P. M.
Night Exp.	5 00 P. M.	4 00 A. M.	4 00 A. M.
Utica Accom'n.	6 00 P. M.	Ar. U. 10 00 P. M.	
N. Y. Mail	11 15 P. M.	10 00 A. M.	10 00 A. M.
	Leave Buffalo.	Leave Bridge.	Arr. Alb'y
New York Exp.	5 15 A. M.	5 15 A. M.	3 30 P. M.
Steamboat Exp.	8 00 A. M.	8 00 A. M.	8 00 P. M.
Mail			2 30 P. M.
Cleveland Exp.	6 00 P. M.	6 00 P. M.	4 40 A. M.
Cincinnati Exp.	11 00 P. M.	11 00 P. M.	8 30 A. M.
Utica Accom'n.			10 00 A. M.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.
ap.20

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P. DUDLEY.

President of the Board,

Jan 5th.

The Railroad Record.

E. D. MANSFIELD, } Editors.
T. WRIGHTSON.

CINCINNATI:

Thursday Morning, Sept. 15, 1859.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

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If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,

Publishers and Proprietors.

]] The European Agents for the *Railroad Record* are MESSRS. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

COVINGTON AND LEXINGTON.—The earnings of this road during the month of August show an increase, though no large, over the corresponding month of 1858, notwithstanding that month was a very heavy one. The increase since the 1st of January last, to September 1, compared with the same period last year, is over \$40,000.

EARNINGS OF THE LITTLE MIAMI.—The following are the approximate earnings of the Little Miami and Columbus and Xenia Railroad for the month of August, compared with those of the corresponding month last year:

August, 1859.....	\$119,740 33
“ 1858.....	113,533 21
Increase.....	\$6,207 12

☞ The grand barbecue in honor of the completion of the Louisville and Nashville Railroad to Bowling Green, came off on Tuesday.

☞ The Pennsylvania Railroad Company are rebuilding most of their bridges on the line of their road between Altoona and Huntington. The new structures are principally iron, and are of the most substantial and durable kind. No railroad company in the Union, has exercised more care and prudence in guarding against the possibility of accident, than the Pennsylvania, and the result of this prudence is shown in the safety that has always attended the operations of this road.

THE TUNNEL AND ITS RAILROADS.

NEW PROJECT.

We are informed the Dayton Short Line Railroad Company (which we call the Tunnel Company,) have elected Mr. R. M. POMEROY, President, a gentleman of ability and enterprise; and intend making a new appeal to the public for its completion. Our readers are well aware, that we have looked upon this enterprise, and that we regard it as not only *practicable*—which all informed men at this time know—but, as *practicable* at a moderate expense, and necessary both to the interests of Cincinnati and the vitality of millions of property, now invested in comparatively unprofitable works. In taking this view of the subject, we are uninfluenced by either interest or prejudice. No advantage has been derived by us from advocating this work; nor do we own either stock or bonds, likely to be enhanced a copper by its construction; but, we do look upon it as one of those works, which, if made, will be of incalculable value to the public, and to all those who own either stock or bonds connected with it. To us, this is a self-evident fact, and we are only surprised that the enterprise has not long since been completed. Feeling the conviction of its importance, we shall give most briefly some of the reasons why it should be undertaken:

1. Whoever has any observation, or any commercial business in Cincinnati, *knows* that the depots of all our roads are far apart, on the borders of the city, and unconnected. It is obvious, also, that while Street Railroads may lessen this inconvenience, it does not wholly take it away. There must be a Depot *on the upper plain of the city*, accessible to the great body of inhabitants, who now nearly all live on that plain, or the *distribution* of business from the depots will always be inconvenient and costly. Passengers must go not only a greater distance, but must go through unpleasant and uncomfortable streets, and lose time. Let us take an example or two, and illustrate the amount of this inconvenience. Take the Little Miami depot. There is not one in one hundred of the passengers from that depot stop *short* of Broadway, and not ten in one hundred stop *below* Third Street. The consequence is, that they lose unnecessarily a half mile in distance, and much more proportionably in time and comfort. Go now to the Hamilton and Dayton depot, and it is further yet to come up to Vine and Walnut Streets. Then go to the Ohio and Mississippi depot, and that is the least convenient of either. Each is on the outer limits of the city, and unconnected with each other. If we look now to the transportation of freight, the cost is greater yet, and the tax on commerce by no means inconsiderable. It is obvious enough, that a depot at the corner of Broadway and Hunt Streets will accommodate three-fourths the people and business of Cincinnati far better. From that point to the

corner of Sixth and Walnut is not very far, with the great advantage of *not going up hill*, and, therefore, rendering the transportation of freight less costly.

2. But, if this manifest improvement in comfort and business is not a sufficient motive to the commercial public, there is another of special interest to one-third of all the property holders in Cincinnati. If any of the citizens and gentlemen, who own property north of Fourth and east of Vine Streets, (which includes the 1st, 13th, 9th, and the greater part of the 2d, 5th, 10th, and 11th wards,) will examine a city map, they will see, *first*, that a great deal of business (and, therefore, values of property also,) has been drawn off south and west, by the influence of railroads. The assessors' appraisements show that lands and lots on the north side of Cincinnati, *are not worth as much in 1859 as they were in 1853*; certainly a most admonitory fact to all concerned in the rise and fall of property, is that extensive region. There can not be a doubt that this is owing chiefly to two facts: 1. To what we said above, the *drawing off* of business; and 2. To the *want of facilities* for reaching dwellings in that region. The latter will, in some degree, be obviated by Street Railroads; but, the first and most important can only be obviated by concentrating business, especially the passenger and retail business, on the *upper plain of the city*, where the great body of people live. It is not necessary for this purpose, that business should actually be in the streets around the depot, or on the hills; but, the *effect* of such a central depot will be to give activity and concentration and value to business and property, in the *upper center* of the city, and this will at once act on that great body of property which lies north.

3. But, there is another motive of the strongest kind, which acts on a large number of persons, and a vast amount of capital. This is the immense amount of railroad property, which must derive a profit, if any, from the *mode in which they can transport products through Cincinnati*. This property is no less than *one hundred and twenty-five millions of dollars*, at least. It is invested in the *N. Y. Central*, the *Pennsylvania Central*, the *Baltimore and Ohio*, and the *N. Y. and Erie*; the *Marietta Road*, the *Wilmington and Zanesville Road*, and the *Delaware and Steubenville Road*. Why do we say this property is all interested? Because, at this very moment, the competition between these lines with each other, and with other lines north of them *turns upon just such an advantage as the Tunnel will give*. We undertake to say, (and no one who examines this subject will contradict us,) that if either one of the great Central Roads were to possess and control a connection with the Tunnel, at Cincinnati, and that were completed, *all competition of other roads with it* (for the trade of the Central West) *would be at an end*.

It would make that road supreme in the control of this business. Why do we say this? Because these great lines now enter Cincinnati on terms of equality, by constantly competing with one another and reducing rates. But, the moment the Tunnel is made, and the Tunnel completed, the road which can control the route, has a *decisive advantage over any other*. This will be plain from the considerations we first advanced. 1. A superior point of distribution. 2. A diminution of cost. 3. A shortness of distance. Now, if what we advance be true, is it not plain, that the road which first seizes this advantage will at once make itself superior to every other? We know not the detail of the matter; but we believe the Baltimore Road, the Pennsylvania Central, and the New York Central can all command the route to the Tunnel, if the Tunnel were completed. We know the two former can; and we know that if the New York Central once allows the middle and Southern routes to get that advantage, all New York and Lake Lines may bid farewell for the freights of the Central West forever. They can not be recalled to what is really an unnatural route to the Lake.

We understand why none of these lines have heretofore sought the control of the Tunnel. They have each watched the other, and know that no movement was made, and they hoped to avoid a temporary advance of credit, or money, in times of financial embarrassments. *That time has past.* A new day has come. It is not now a question of watching, but of jumping. *Somebody* will take advantage of the Tunnel, and when it comes, where will they be who are behind?

If this argument is correct for the great Central routes, how much more is it for the Marietta and Wilmington Roads. We believe the bondholders of these two roads have invested some nine or ten millions of dollars in them, have filed bills for foreclosure, and the roads are in the hands of receivers. Now, we should be glad to know how these bondholders propose to make their capital available, when they have got the roads, unless they can make the roads themselves available? The roads may be, and really are, *intrinsically*, very valuable; and yet, just such embarrassments and burdens—as *having no termini*—may neutralize their intrinsic advantages. For example, the Marietta Road pays \$60,000 per annum to carry its business over twenty-three miles of the Little Miami. Now *one half* the capital of which that is the interest will finish the Tunnel. For an advance, even of credit to that amount, would put the Tunnel and twelve miles of road beyond a doubt. So also of the Wilmington Road. So also of the Steubenville Road, which has also just been put in the hands of a receiver. We are told that \$400,000 will fully construct the Tunnel.

Such are the imperative arguments in

favor of this route—alike necessary to the interests of the city and the country—of property holders and of railroads.

THE KENTUCKY CENTRAL.

THE UNION OF THE NORTH AND SOUTH OF RAILROADS.

The advertisement for the sale of the *Covington and Lexington Railroad*, by a Master Commissioner, reminds us of the *plan of union*—a substantial, solid one, which we have always advocated in the strongest manner. We mean the Air Line, through Kentucky, which will unite the Ohio River, at Cincinnati, with the Tennessee, at Knoxville. Each year makes the argument, and we say, the ultimate *necessity* for this road stronger. We know not whether the order for the sale of the Covington Road, be a friendly or an adverse arrangement among the claimants and proprietors. But, we *do* know that, into whatsoever hands it may fall, the value of that road will be more than doubled, by the completion of the road between Lexington and the Tennessee line. This is so obvious, that we shall say nothing on that head; but, we shall proceed to state again some of the general facts and reasons which render a line of railroad between the Ohio and the Tennessee Line, one of the commercial and social wants of the country. We shall begin, by showing *what* such a road would do, and secondly what is required to make it.

1. This road would unite the North and South, by a *Central Air Line, in the heart of the Nation*. This is obvious. Cincinnati is very near the commercial and social center of the United States. In fact, commercially it is that center. Knoxville is in the center of the South, and connected by railroads with every part of it. Between these centers, the one will *radii* on the North, and the other will *radii* on the South, there is really *no connection*. For a stage or wagon road is, at this period of the world, no commercial connection. At each of these centers, there are large rivers, but these rivers flow not towards one another, but at first, nearly parallel, till they unite in the far South-west, and in the meanwhile, lofty mountain ridges separate their vallies. The commerce, as yet but small, which passes between them, has to pass down one, or the other of these streams, and over four times the real distance, or over a long and circuitous railroad route through Nashville. There is, in fact, no encouragement to either social or commercial intercourse between these centers. Let us see now what railroads lie, on either side, to be connected, without counting any but direct lines, from each point, and these only to points, from which no other good communication can be had.

On the South side, at Knoxville, we have these, viz:

1. Knoxville to Dalton.....	110 miles.
Dalton to Atlanta.....	100 "
Atlanta to Macon.....	101 "
Macon to SAVANNAH.....	191 "
2. Atlanta to AUGUSTA.....	502 "
3. Augusta to CHARLESTON.....	171 "
4. Augusta to WILMINGTON (N. C.) via Kingsville, (S. C.).....	137 "
5. Atlanta to MONTGOMERY (Alab.) via West Point.....	286 "
6. Knoxville to LYNCHBURG.....	175 "
	334 "

Aggregate.....1,605 "

Now these 1,605 miles are absolutely finished, and connect Knoxville directly, with the most important places of the South, viz:—AUGUSTA, (Ga.); SAVANNAH, (S. C.); MONTGOMERY, (Alabama); WILMINGTON, (N. C.); and LYNCHBURG, (Va.) These several places are the central points of commercial business for the interior country lying around them. The result is, that if there were an *attraction—i. e.*, a market for the produce of that country, whose radius is five hundred miles, and comprises the States of Tennessee, Georgia, Alabama, South Carolina, North Carolina, and Virginia—the entire South *proper*—the whole trade of the entire region would be drawn towards Knoxville. Now this town, nor its particular section, does not offer this market for such things as cotton, rice, and coffee, which are peculiar to that country. But, if a railroad—a good one—connected Knoxville with Cincinnati, there would be that attraction; for, there would then be *radii* to all the commercial cities of the North-west. Let us now see how the Northern *radii* center at Cincinnati.

These are the lines, viz:

1. CINCINNATI to CLEVELAND.....	254 miles.
2. Cincinnati to WHEELING (in addition).....	141 "
3. Cincinnati to PARKERSBURG.....	173 "
4. Cincinnati to SANDUSKY.....	213 "
5. Cincinnati to PITTSBURG, (in addition to No. 1).....	117 "
6. To TOLEDO, (in addition to No. 4).....	141 "
7. Cincinnati to CHICAGO.....	322 "
8. Cincinnati to ST. LOUIS.....	340 "
9. Cincinnati to LOUISVILLE, (in addition to No. 8).....	50 "

Aggregate.....1,754 "

In these 1,754 miles are *excluded* all branches, and all extensions, which are not in direct and immediate connection with Cincinnati. These direct lines connect the center—Cincinnati—with Parkersburg, Wheeling, Pittsburg, Cleveland, Sandusky, Toledo, Chicago, St. Louis, and Louisville, by direct *radii*, of more than three hundred miles in length. The diameter is six hundred miles. The country included is the entire surface of Ohio, Indiana, and Illinois, making 140,000 square miles, with more than five millions of people. Now, around the center of this region, and around that of the South, we have these results:

Central at the North, (Cincinnati).....	1,754 miles R. R.
Central at the South, (Knoxville).....	1,605 "

Aggregate.....3,359 "

These two systems are entirely separate; a gulf almost impassable in any way separates them. Can any one doubt, that a road uniting these two would be profitable? That it would be of immense service to the country through which it passes? That it would do

more for social, political, and commercial harmony, than any, or all other means?

Now, let us see, whether it may not be easily made, or whether, under such circumstances, it ought not to be?

2. We see that the Covington and Lexington Road is now complete, and doing a heavy business; and that twelve miles of the Danville Road is finished. We have 111 miles, then, of railroad on the way to Knoxville. We do not say that this is the shortest and best route, were a route now open, and we allowed to choose one—*aborigine*. But, 111 miles are made, and it is a great gain, in cost and distance, to continue that line to the Tennessee boundary. Let us suppose it done, how much remains to be done? So much of the work is done, on the Danville Road, that if the extension were secured, we may assume that also as finished. There is but one hundred miles of road to make to unite with the Tennessee roads, and that passes through four counties of Kentucky. Supposing the road to cost (as it would do,) with its equipments, \$3,500,000, what would that really be among so many and powerful parties interested in it? One third should be raised in Kentucky; one third by the credit of Northern Railroads, and one third by those at the South, and in case any failure should take place, one third of the cost may be borrowed. The result, in the connection of thousands of miles of railroads, and the immense commerce connected with them, by a single line, can not be doubtful. It would be great and momentous, producing changes in the direction of internal commerce, and vastly increasing the commerce of Cincinnati.

These ideas we have published before; but, it is one of these cases in which line upon line and precept upon precept, seem necessary. We are so thoroughly convinced of the necessity and benefits of this work, that we shall never cease to advocate it; and while it remains unfinished, never cease to wonder at the short-sightedness which delays its execution. We believe the effect of that connection will be unequalled, by any thing, which has yet been accomplished by the construction of railroads.

IMPORTANT RAILROAD DECISION.—The tonnage tax suit which has been on trial for the past few days at Harrisburg, and the parties to which were the Commonwealth and the Pennsylvania Railroad Company, was on Friday decided against the Company. The suit came up on an appeal by the Company from a settlement made by the Auditor General and State Treasurer with the Company, by which they were found indebted to the State in the sum of \$87,000, for a period of five months up to the first of November last, for tonnage due the State passing over the road from Philadelphia to Harrisburg. The Railroad Company contended that they are not liable to pay tax on goods coming from other States and passing this State, and also that the law imposing this tax is unconstitutional. The Company presented a mass of testimony showing their connections with different railroads, steamboat lines, etc. The Commonwealth, on the other hand, contended that the Pennsylvania Railroad was only a local road, and possessed no chartered privileges outside of the State, and that the Company had no right to act as warehousemen to receive goods and forward them—that their legitimate business consisted only in shipping goods over their road when brought to them etc. The question was very ably argued on both sides, and will now, in all probability, be taken to a higher Court.

SOUTH-WESTERN RAILROAD CO.

From the President's Report to the Stockholders, now before us, we learn that—

The net sum earned, for the year, after paying all ordinary and extraordinary expenditures, as shown in the Report, is.....	\$282,230 20
The following amounts have been paid—Dividend Feb., 1859, 4 per cent.....	\$5,620 00
Interest on Bonds.....	28,344 50
Annuity to the city of Macon.....	1,250 00
And a dividend has this day been declared on the Stock as held 1st August, inst., at the rate of 8 per cent. per annum.....	90,160 00
Total.....	205,374 50

Leaving a Surplus of Earnings, after payment of dividends and all interest..... \$76,855 70

The exhibition of so handsome a surplus, considering the large expenditures over and above ordinary expenses, viz., \$55,538 85, is highly gratifying.

The progress of the extension has been satisfactory, and the final completion of the work is now so near that it can be seen, with tolerable accuracy; what will be the condition of the Company when Fort Gaines, and the Chattahoochee at Eufaula, shall have been reached.

The Stock of the Company 1st August, inst., as shown by the Treasurer's Balance Sheet, amounted to.....	\$2,254,000 00
The Stock earned, and to be earned by Contractors, will amount to.....	246,000 00

At the Completion, the Stock will be.... \$2,500,000 00

The Bonds of the Company, as shown by the same Balance Sheet on 1st August, inst., amounted to.....	\$631,000 00
The Bonds earned and to be earned by Contractors, will amount to.....	130,000 00

At the Completion, the Bonds will be.... \$761,000 00

There should be added to the amount of Bonds, for cash to be thereby raised, the sum of \$139,000. So when the Road shall have been finished, the capital Stock will be \$2,500,000, and the bonded debt of the Company will be \$900,000, making altogether \$3,400,000. To pay the interest on the Bonds, and dividends at the rate of eight per centum per annum, the annual sum of \$263,000 will be required.

The table of work done and to be done on the extension, shows that there is yet to be expended the sum of \$650,000 to finish the road. Of that sum of \$650,000, there will be payable in cash, \$407,000; the remainder will be payable in Bonds and Stock of the Company. The funds received for extension of road, have, during the progress of the road, yielded an interest amounting to \$50,629 13. It has not been found necessary to touch that sum in declaring dividends heretofore, and it will not be necessary to use it in aid of dividends hereafter. The extension fund now is \$216,782 97; if we add the above item of interest, \$59,629 13, the cash fund for extension will be \$276,412 10; and if Bonds to the amount of \$130,000 be sold, there will be raised the sum of \$406,412 10, the amount of cash necessary to complete the road.

As the income of the Company for the year just ended, after paying an extraordinary expense of \$55,538 35, has been \$282,230 20,

there can not be any doubt whatever of the ability of the Company to pay regularly to the stockholders eight per centum per annum. It is, certainly, reasonable to expect that the net income of the road for this current year, after the payment of ordinary expenses, will be \$350,000—a sum sufficient to pay all interest, and dividend of eight per cent., and leave \$90,000 at least, to meet extraordinary expense.

The future of this Company is full of promise, they are now near the end of their road building, they have a road 206½ miles long of main line, and 14¾ miles of sidelings, well equipped and furnished with depots, and other necessary appurtenances. The Capital Stock of the Company, and its bonded debt together, will not exceed \$3,400,000. The road and equipment, however, will have cost more than \$3,400,000. Its present cost is near \$280,000 over and above the aggregate of the Stock and bonded debt; the difference has been paid out of the general earnings of the Company. These general earnings, after paying dividends of eight per centum per annum and interest on Bonds, will still go in aid of finishing the road. When the road is finished, or at the beginning of the next fiscal year (August, 1860,) it will be the duty of the Board to consider the propriety of issuing Stock, by way of dividend, to Stockholders, to such an amount over \$3,400,000 as the value of the property may exceed that sum. That the property can be placed at more than \$3,400,000 and still pay a certain dividend of eight per cent., seems to this Board, very clear. How far the value may exceed \$3,400,000 can, in August, 1860, be determined with accuracy and safety. The Stock of the Company, which was at the last report of the Board depressed, has since risen in the markets of Savannah and Macon, to within a trifle of par.

The system of Railroads in Georgia now existing, and yielding fair remuneration to Stockholders, may be briefly described as follows: The city of Macon, which is very near the center of the State, is the center of the railroad system of Georgia. From Macon, lines of railroad run south-eastwardly to Savannah, and north-westwardly to Chattanooga, making a continuous railroad from the Atlantic seaport of the State, to the River Tennessee at Chattanooga. Another line (the South-Western Railroad,) runs from Macon to Albany, Fort Gaines, and Eufaula; another line connects Macon with Columbus; another connects Macon with Augusta, and another with the Chattahoochee, at West Point. Macon is also connected by rail with Eatonton, a point twenty-two miles South of Madison on the Georgia Railroad. The Georgia Railroad runs from Atlanta to Augusta. The Savannah Road and Main Trunk make a line from Savannah through the Southern border of the State to Bainbridge and the Chattahoochee. There is a line from the Georgia Railroad,

leading from Union Point to Athens, and there are short roads leading to Rome, to Washington, and to Thomaston. Such is the general system at this day. If the short road from Eatonton to Madison is built, and the system be extended from Athens to Rabun county, and the South-western Railroad line be carried to Bainbridge; the extreme south-eastern part of the State, the north-western corner, the south-western and north-eastern corners—in a word, the four corners of the State—will be united by Railroads, all passing through the center at Macon. The lines passing across the State—to wit, from West Point to Augusta and from the neighborhood of the junction of the Flint and Chattahoochee to Savannah, with such a connection of the four corners as is indicated above, would seem to be enough to develop the State, and to gratify the most ambitious mind. A more perfect system of railroads could not be found in any State in the Union.

Statement of the Receipts and Disbursements of the Funds of the South-Western Railroad Company, to August 1st, 1859.

RECEIPTS.

Received for Capital Stock—15,698 Shares...	\$1,569,800 00
" " Extension do. 6,842 " "	684,200 00
Total.....	\$2,254,000 00
Forfeited Stock.....	\$24,040 20
Funds for Extension of Road.....	330 00
Terrill and Cuthbert List.....	1-9 92
Amount overpaid on Capital Stock.....	31 85
Bond Account, issued for ten years.....	24,591 97
Freight Earnings, since August 1, 1858.....	409,000 00
Passenger Earnings, since August 1, 1858.....	326 759 75
Post Office Department, " Mail Service,".....	190,703 08
Central Railroad " Passage Acct.,".....	11,027 50
Central Railroad " Freight do. "	528,490 33
Muscookee Railroad " Passage Ac-count,".....	658 51
Muscookee Railroad " Freight Ac-count,".....	6,933 31
Augusta and Savannah R. R. " Passage Ac-count,".....	946 76
New York Steamship " Passage Account,".....	802 01
Macon and Western Railroad " Freight Ac-count,".....	1,748 77
Premium and Discount.....	156 95
Unclaimed Dividends, Nos. 1 to 13.....	547 50
Profit and Loss.....	774 56
Extension Account.....	2,219 17
	640 00
	284,608 22
	410,323 42
	\$3,924,012 71

DISBURSEMENTS.

Construction.....	\$1,951,668 55
Locomotive Engines.....	\$122,160 14
Passenger Cars.....	36,814 84
Freight Cars.....	102,472 18
Macon Depot.....	52,982 13
Tools and Machinery.....	14,128 07
Current Expenses.....	328,557 36
Interest Account.....	254,743 52
Annuity to City of Macon.....	1,250 00
Dividend No. 14, paid.....	29,594 50
Stock in other Companies.....	83,668 00
New York Propeller Line.....	26,258 71
City of Columbus Bonds.....	5,000 00
Montgomery and West Point R. R. Bonds.....	4,492 27
	900 00
	36,650 98
—EXTENSION ACCOUNTS—	
Right of Way.....	15,430 60
Engineering, etc.....	33,139 15
Way Stations.....	15,633 99
Incidental Expenses.....	2,427 07
Clearing and Grubbing.....	26,720 51
Bridges and Wood Culverts.....	22,215 52
Masonry and Foundation.....	8,629 44
Superstructure.....	60,019 11
Rock Excavation.....	11,718 75
Iron Rails, Spikes, etc.....	168,537 65

Excavation and Embankment.....	353,842 44
Road Crossings and Cattle Guards.....	950 29
Interest on Bonds.....	9,955 00
Balance.....	509,769 52
	429,160 28
	\$3,924,012 71

THE BALANCE consists of—

Cash on hand, as per Cash Book.....	\$3,057 92
Cash on deposit at Marine Bank Az'y.....	26,547 98
" " " Central R. R. Bank.....	163,309 30
" " " American Exchange Bank, New York.....	942 85
Bills Receivable.....	192,800 13
" " Extension.....	4,374 42
	228,927 81
	233,302 23
Balance.....	\$429,160 28

At the annual election, for President and Five Directors, for the ensuing year, the following gentlemen were unanimously elected, viz:

President—R. R. Cuyler.

Directors—John W. Anderson, William A. Black, William S. Holt, T. M. Furlow, Robert A. Smith.

THE MOSELEY BRIDGE FOR ACQUEDUCT PURPOSES.

Our readers will remember our early notices of the Moseley Bridge, as a safe, reliable, and economical structure. We gave our opinion of its value, based upon the following reasons:

1st. It is built in the best form for a bridge. All experience shows the arch to be the best form in which to dispose the material of a bridge, when its strength depends upon its power to resist crushing.

2d. It is built of the best material. These bridges being all iron, combine the advantages of the greatest strength, with the least weight and cost.

3d. The arch being a continuous tube, has the amount of material disposed in the best possible manner.

With these advantages in construction, bridges of the Moseley pattern combine lightness, cheapness, durability and strength. The experience of the past two years in which many of these structures have been erected, has demonstrated the truth of our opinions, so far as concerns turnpike purposes. We believe it is generally conceded that the Moseley bridge is decidedly the best Turnpike Bridge now in use. Experiments that we have seen on bridges of sufficient size, not merely on models, also convince us that it will be adopted as a railroad structure, and, as such, will excel in strength and durability. During the past week, we have seen it tested in a new capacity—as an aqueduct—and it has fully realized our expectations. The Moseley Bridge Co. have now erected at their factory on Third street, a bridge of 50 feet span, resting on wooden abutments. The arches are very light, being made of iron 0.20 inches in thickness, forming a triangular tube 6 inches on the side, and 4½ inches on the base, and weighing 700 lbs. each or 1,400 lbs. in all. The weight of the whole structure, including braces, suspension-rods for floor, &c., is 3,000 lbs. On this, a wooden aqueduct has been constructed, and water

run in. The bridge laterally had only one brace in the center. As the water was run in, the effect at the different depths was carefully watched. No deflection was observed till the weight on the bridge amounted to 68 tons 750 lbs., or 136,950 lbs., nearly 100 lbs. burden to 1 lb. material in the arch. The arches were then observed to gradually assume a lateral deflection at the hips, of about one inch. The weight was allowed to rest on it for several days, and no further deflection appearing, the water was drawn off. The arches were then straightened, and a lateral brace fastened to each hip, in addition to the one in the center. Thus stiffened, the water was again let on till the weight amounted to 80 tons, or 160,000 lbs., or over 110 lbs. burden to 1 lb. material in the arch, and no deflection observed, either laterally or perpendicularly. The weight has now been several days upon the bridge, and it is still unmoved. We learn that it is the intention to increase the weight until the structure falls. We shall endeavor to note the progress of this interesting experiment, and give our readers the final results. Much credit is due to the Moseley Bridge Co., for their enterprise in conducting an experiment of this nature on so large a scale. It must be regarded as a much more satisfactory test, although a more expensive one, than could have been made with models. The bridge in question is of the turnpike pattern, but it would be easy to calculate the additional weight that could be safely put on a structure, when the arches were made larger and of heavier iron.

(From DeBow's Review.)

WESTWARD THE STAR OF EMPIRE.

THE GREAT WESTERN VALLEY—ITS GROWTH OF POPULATION AND OF CITIES.

(CONCLUDED.)

Refraining from further comment, let us bring the actual development of the interior cities—on the navigable rivers and on the lakes—into juxtaposition, for easy comparison. As our comparison of Atlantic cities with the cities of the plain has been made for thirty years, from 1830 to 1860, we continue it here for the same period, between the river cities and lake cities. We select twenty cities, now the largest of each region, and put down the population in round numbers as nearly accurate as practicable. That for 1860, is, of course, an estimate only, but it is certainly near enough to the truth to illustrate the growth, positive and comparative, of our interior cities.

This table exhibits a growth of the interior cities on the navigable waters of the Mississippi and its affluents, which brings their population, in 1870, up to 11 4-10 times that of 1830. This is, unquestionably, much beyond the expectation of their most sanguine inhabitants, at the commencement of that period, being three times that of the chief cities of the Atlantic border. Yet even this rapid development is seen, by our figures, to fall far behind that which has characterized the cities created by lake commerce during the same period.

Interior River cities.	1830.	1860.
Cincinnati and dependencies.....	25,500	250,000
Pittsburgh,	15,500	155,000
St. Louis,	6,000	180,000
Louisville,	11,000	60,000
Memphis,	2,500	25,000
Wheeling,	6,000	20,000
New Albany,	1,500	20,000
Quincy,	1,000	19,000
Peoria,	800	18,000
Galesna,	2,000	18,500
Keokuk,	50	16,000
Dubuque,	100	16,000
Nashville,	6,000	15,000
St. Paul,	2,500	13,000
Madison, Ind.,	2,500	13,000
Burlington, Ind.,	300	13,000
La Fayette, Ind.,	300	13,000
Rock Island,	500	8,000
Jeffersonville,	500	8,000
	91,550	914,000
Lake Cities.	1830.	1860.
Chicago and dependencies.....	100	150,000
Buffalo,	8,663	100,000
Detroit,	2,222	80,000
Milwaukee,	50	75,000
Cleveland,	1,047	70,000
Toronto, C. W.	1,667	65,000
Rochester,	9,269	50,000
Hamilton, C. W.	1,500	25,000
Kingston, C. W.	2,500	20,500
Oswego,	3,200	20,500
Toledo,	30	20,000
Sandusky City,	350	14,000
Erie,	1,000	10,000
G. Rawids, Mich.,	300	10,000
Kenosha,	100	10,000
Racine,	400	10,000
St. Catherine's, C.W.,	400	10,000
Waukegan,	100	8,000
Port Huron,	100	8,600
Fond du Lac,	20	8,000
	32,408	764,000

These, according to the table, exhibit a growth which makes them, in 1860, more than twenty-three times as populous as they were in 1830. This is double the progress of the river cities, and more than five times that of the cities of the Atlantic coast. In the face of these facts, how can intelligent men continue to hold the opinion that New York is to continue long to be, as now, the focal point of North American commerce and influence? Yet well-informed men do continue to express the opinion that New York will ever hold the position of the chief city of the continent.—Every one at all familiar with the location and movement of our population, knows that the central point of its numbers is moving in a constant and almost unvarying direction west by north. An able investigator, now professor of law in the University of Michigan, Thomas M. Cooley, five years ago, entered into an elaborate calculation to ascertain where the centre of population of the United States and Canadas was, at that time. The result showed it to be very near Pittsburgh. It is generally conceded that it travels in a direction about west by north, at a rate averaging not less than seven miles a year. In 1860 it will have crossed the Ohio river, and commenced its march through the State of Ohio. As our internal commerce is more than ten times as great as our foreign commerce, and is increasing more rapidly, it is plain that it will have the chief agency in building the future and permanent capital city of the continent. If the centre of population were, likewise, the centre of wealth and industrial power, other things being equal, it would be the position of the chief city, as it would be the most convenient place of exchange for dealers from all quarters of the country. But this centre of wealth and industrial power does not keep up, in its western movement, with the centre of population; nor, if its movement were co-incident, would it be at or near the right point for the concentration of our domestic and foreign trade, while traversing the interior of Ohio. If we suppose our foreign commerce equal to one-fifteenth of the domestic, we should add to the thirty-three millions of the

States and the Canadas, upward of two millions of foreigners, to represent our foreign commerce. These should be thrown into the scale represented by New York. This, with the larger proportion to population of industrial power remaining in the old States, would render it certain that the centre of industrial power of our nation has not travelled westward so far as to endanger, for the present, the supremacy of the cities central to the commerce of our Atlantic coast. Until the centre of industrial power approaches a good harbor on the lakes, New York will continue the best located city of the continent for the great operations of its commerce. That the centre of wealth and consequent industrial power is moving westward, at a rate not materially slower than the centre of population, might be easily proved; but, as those who read this article with interest must be cognizant of the great flow of capital from the old world and the old States to the new States, and the rapid increase of capital on the fertile soil of the new States, no special proof seems to us to be called for. The centre of power, numerical, political, economical, and social, is then, indubitably, on its steady march from the Atlantic border toward the interior of the continent. That it will find a resting place somewhere, in its broad interior plain, seems as inevitable as the continued movement of the earth on its axis. The figures we have submitted of the growth of the principal lake cities, plainly show great power in lake commerce, so great as to carry conviction to our mind that the principal city of the continent will find its proper home and resting-place on the lake border, and become the most populous capital of the earth. A full knowledge of the geography of North America will tend to confirm this conviction in the mind of the fair enquirer.—The lakes penetrate the continent to its productive centre. They afford, during eight or nine months of the year, pleasant and safe navigation for steam propelled vessels. Their waters are pure and beautifully transparent, and the air which passes over them exceedingly invigorating to the human system. Their borders are replete with materials for the exercise of human industry and skill. The soil is fertile and very productive in grains and grasses. Coal in exhaustless abundance crops out or near their waters, to the extent of nearly one thousand miles of coast. The richest mines of iron and copper, convenient to water transport, exist, in aggregate amount, beyond the power of calculation. Stone of lime, granite, sand, and various other kinds suitable for the architect and the artist, are found almost everywhere convenient to navigation. Gypsum of the best quality crops out on the shores of three of the great lakes, and salt springs of great strength are worked to advantage, near lakes Ontario and Michigan. Timber trees, in great variety and of valuable sorts, give a rich border to the shores for thousands of miles. Of these, the white oak, burr oak, white pine, whitewood or tulip tree, white ash, hickory and black walnut, are the most valuable. They are of noble dimensions, and clothe millions of acres with their rich foliage. No where else on the continent are to be seen such abundance of magnificent oaks, and the immense groves of white pine are not excelled. Heretofore, little esteemed, the great tracts of timber convenient to lake navigation and to the wide treeless prairies of the plain, are destined soon to take an important place in the commercial operations of the interior. Already, oak timber, for ship-building and other purposes, finds a profitable market in New York and Boston. The great Russian steamship "General Admiral" was built in part from

the timber of the lake border. A great trade is growing up, based on the products of the forest. Whitewood (*Dirindendron tulipifera*.) oak staves, black and white walnut plank, and other indigenous timber, are shipped, not only to the Atlantic cities, but to foreign ports.—The lumber yards of Albany, New York, Philadelphia, as well as those of Chicago, Milwaukee, Detroit, Toledo, Cleveland, and Buffalo, receive large supplies from the pineries bordering the great lakes. Cincinnati and other Ohio river cities, receive an increasing proportion of pine lumber from the same source. These great waters are also, as is well known, stocked with fish in great variety, whose fine gastronomic qualities have a world-wide reputation.

As before stated, these lakes penetrate the continent toward the northwest as far as its productive centre. They now have unobstructed connection with the Atlantic vessels of nine feet draft and three hundred tons burden, by the aid of sixty-three miles of canals, overcoming the falls of the St. Mary, Niagara, and St. Lawrence rivers, with a lockage of less than six hundred feet. By enlarging some of the locks and deepening the canals, at a cost of a very few millions, navigation for propellers of from one thousand to two thousand tons may be secured with the whole world of waters. The cost is much within the power of the Canadas and the States bordering the lakes, and will be but a light matter to these communities when, within the next fifteen years, they shall have doubled their population and trebled their wealth. The increase of the commerce of the lakes, during the last fifteen years, is believed to be beyond any example furnished by the history of navigation. A proportionate increase the next fifteen years, would give, for the yearly value of its transported articles, thousands of millions. According to the best authorities, it is now over four hundred millions. In 1855, that portion of the tonnage belonging to the United States was one-fifteenth of the entire tonnage of the Union. During the same year, the clearances of vessels from ports of the United States to the Canadas, and the entrance of vessels from the Canadas to ports of the United States, as exhibited in the following table, show a greater amount of tonnage entered and cleared than between the United States and any other foreign country:

Clearances from ports in the United States to ports in Canada in 1855:	
Number of American vessels.....	2,369
" Canadian "	6,638
Whole number.....	9,067
Tonnage American.....	890,017
" Canadian.....	903,502

Total cleared from the States.....1,793,519

The registered tonnage of all the States, the same year, was 2,676,864; and the registered and enrolled together, 5,212,000.

The value of lake tonnage was, in 1855, \$14,835,000. The total value of the commerce of the lakes, the same year, was estimated, by high authority (including exports and imports) at twelve hundred and sixteen millions (\$1,216,000,000.) This seems to us an exaggerated estimate, though based principally on official reports of collectors of customs. Eight hundred millions would, probably, be near to the true amount. It will surprise many persons to learn, that the trade between the United States and Canadas, carried on chiefly by the lakes and their connecting waters, ranks third in value and first in tonnage, in the table of our foreign commerce; being, in value, only below that of England and the French Empire, and in tonnage above the British Empire.

TRADE WITH CANADA.

American goods to Canada.....	\$9,950,764
Foreign goods.....	8,769,580
	\$18,720,344
Canadian goods to the States.....	12,182,354
	\$30,902,658

We here append a table, showing the progress, from decade to decade, of the principal centres of population of the plain since 1830. It has been made with all the accuracy which our sources of information enable us to attain. There are in it, no doubt, many errors, but it will be found, in the main, and for general argument, substantially correct. For future reference, it will be valuable to persons who take an interest in the development of our new urban communities. Included in each city are its outlying dependencies—such as Newport and Covington with Cincinnati, and Lafayette with New Orleans.

	1830.	1840.	1850.	1860.
New Orleans.....	46,310	90,000	130,565	180,000
Cincinnati.....	2,831	47,000	130,739	250,000
St. Louis.....	5,832	16,469	82,000	180,000
Chicago.....	100	4,630	29,963	150,000
Pittsburgh.....	12,568	25,000	71,593	150,000
Buffalo.....	8,653	18,213	42,365	100,000
Montréal.....	30,000	40,000	55,000	90,000
Louisville.....	10,341	21,210	43,191	89,000
Detroit.....	2,222	9,102	21,019	80,000
Milwaukee.....	50	1,730	20,061	75,000
Cleveland.....	1,047	6,071	19,377	70,000
Toronto.....	1,677	13,500	27,500	70,000
Rochester.....	9,219	20,191	36,409	50,000
Quebec.....	26,250	32,500	41,200	55,000
Columbus, O.....	2,450	6,671	17,882	40,000
Mobile.....	3,194	12,672	20,515	35,000
Hamilton, C. W.....	1,500	4,200	13,000	25,000
Memphis.....	1,500	3,500	8,339	25,000
Nashville.....	5,566	6,929	10,478	25,000
Dayton.....	2,354	6,167	10,977	25,000
Indianapolis.....	1,000	2,692	8,134	22,000
Wheeling, Va.....	5,221	7,853	11,335	20,000
Kingston, C. W.....	2,500	5,500	10,000	20,000
Lockport, N. Y.....	3,200	6,500	12,323	20,000
Oswego.....	3,200	4,665	12,205	20,000
Toledo.....	30	1,299	3,829	20,000
Zanesville.....	3,000	6,600	12,355	20,000
New Albany.....	est. 1,500	est. 4,000	9,695	20,000
Peoria.....	est. 800	est. 2,400	5,095	20,000
Quincy, Ill.....	est. 1,000	est. 3,000	6,902	20,000
Galesna.....	2,000	4,000	6,004	20,000
Dubuque.....	200	1,500	3,168	16,000
Keokuk.....	1,000	1,000	2,478	16,000
Davenport.....	500	500	1,248	12,000
Burlington, Ia.....	1,000	4,000	4,682	12,000
Columbus, Ga.....	1,000	4,000	5,942	10,000
Alton, Ill.....	250	2,500	3,385	10,000
Steuensville.....	2,964	5,213	6,140	9,000
Chillicothe.....	2,840	3,977	7,100	9,000
Grand Rapids, Mich.....	300	1,500	3,148	9,000
Huntsville, Ala.....	1,200	1,500	2,863	6,000
Adrian, Mich.....	200	1,800	3,046	9,000
Ann Arbor.....	200	2,000	4,668	9,000
Sandusky City.....	350	2,000	8,500	13,000
Fort Wayne, Ia.....	100	1,600	4,282	13,000
Madison, Ia.....	2,590	4,500	8,508	13,000
St. Paul, Min.....	2,000	2,000	1,012	15,000
Lafayette, Ia.....	290	2,000	6,129	13,000
Maysville, Ky.....	1,800	2,741	4,256	9,000
Terre Haute, Ia.....	600	2,000	4,900	9,000
Evansville, Ia.....	300	1,500	3,235	9,000
Jeffersonville, Ia.....	500	2,000	3,487	9,000
Portsmouth, Ohio.....	1,000	2,000	4,611	9,000
Marietta, O.....	1,200	1,815	5,254	9,000
Springfield, Ill.....	800	2,579	4,533	9,000
Rock Island City.....	400	400	1,711	8,000
Chattanooga, Ten.....	500	1,000	3,500	8,000
Brown, or.....	500	2,000	5,000	10,000
Ottawa, C. W.....	500	2,000	5,000	10,000
London, C. W.....	500	2,000	5,000	10,000
St. Catharines, Do.....	200	200	4,000	10,000
Galveston, Texas.....	1,200	2,000	4,177	10,000
Houston.....	500	500	3,000	10,000
Erie, Pa.....	1,200	3,500	5,858	10,000
Lexington, Ky.....	4,500	6,997	9,100	10,000
Ozarksburg.....	1,500	3,000	6,500	10,000
Natchez, Miss.....	2,000	3,000	4,434	9,000
Three Rivers, C. E.....	800	2,000	4,000	8,000
Racine, Wis.....	1,000	1,000	5,111	9,000
Waukesha.....	200	200	2,313	8,000
Marshall, Mich.....	200	1,200	2,822	8,000
Pontiac.....	150	1,300	2,820	8,000
Pt Huron.....	110	400	2,313	8,000
Jack'n City.....	150	1,000	3,051	6,000
Kalamazoo.....	150	900	2,363	6,000
Mineral Pt., Wis.....	50	800	2,584	6,000
Kenosha.....	500	500	3,555	6,000
Fond du Lac.....	1,000	1,000	3,451	6,000
Janesville.....	1,200	1,200	2,782	7,000
Beloit.....	500	500	2,732	6,000
Madison.....	100	100	1,500	7,000

Elgin.....	100	2,339	5,000
Oshkosh.....	100	2,500	6,000
Monroe, Mich.....	400	2,813	5,000
Lansing.....	100	1,249	5,000
Baton Rouge, La.....	500	2,200	3,900
Columbus, Miss.....	800	1,500	2,611
Jacksonville, Ill.....	800	1,500	2,745
Waukegan.....	800	2,949	6,000
Lafayette.....	50	1,000	3,201
Ottawa.....	1,200	3,219	6,000
Joliet.....	1,000	2,659	6,000
Jefferson City, Mo.....	1,000	2,000	3,000
St. Joseph.....	1,000	2,557	5,000
Independence.....	500	3,500	6,000
Iowa City, Iowa.....	400	1,582	5,000
Muscatine.....	400	2,540	6,000
Springfield, Ohio.....	1,000	2,094	5,108
Newark.....	1,000	2,705	3,654
Hamilton.....	800	1,409	3,710
Lancaster.....	1,000	2,130	3,483
Akron.....	800	1,664	3,266
Mt. Vernon.....	800	2,363	3,711
Tiffin.....	800	728	2,718
Urbana.....	400	1,070	3,414
Massillon.....	600	1,300	2,697
Lawrenceburg, Ia.....	600	2,000	3,487
Richmond, Ia.....	500	1,000	1,443
Knoxville, Tenn.....	1,800	2,076	6,000

The preceding table is instructive, showing, as it does, the steady and rapidly increasing tendency of the people of the plain to seek a home in cities and villages, notwithstanding the great temptation which fertile, cheap and easily improved lands hold out to become tillers of the soil and growers of cattle. Stock farming is largely remunerative; but our western people—wild and uncultivated as they are supposed to be by those unacquainted with their true character—prefer homes where the advantages of education and social intercourse is a daily enjoyment. Nowhere in the world are educational establishments on a better footing or more universally accessible than in some of the new States of the centre, as in Ohio, Michigan, Wisconsin, &c.

J. W. S.

STREET RAILROAD EXCITEMENT ON THE RIVER ROAD.

The people residing on the river road are indignant with the Trustees of Storrs township, for making a contract with the Cincinnati Street Railroad Company for bartering the right of way for a track on that road, upon terms injurious to the township. We have a copy of the contract before us, from which we make an abstract, showing its character, viz:

1st. Said Company pays \$7,000 for right of way.

2d. The capital stock shall consist of fifty shares of fifty dollars each, and the residents of the township have the privilege of subscribing.

3d. Provides for a single track of five feet two inches gauge, to be laid on the South line of the road where there are no buildings or other obstructions to interfere—otherwise, to be laid in the center of the road. No switching allowed where there are buildings on either side of the road, unless they are permitted by the Township Trustees. The track to extend, by connection or otherwise, from the western line of Storrs township to Fourth and Walnut Streets, Cincinnati.

4th. Said Company to boulder (when boulders can be had conveniently, and at reasonable rates,) inside of their track, and to keep said track, and that portion of the road appropriated to them in good order and repair, and said Trustees reserve for all ordinary purposes of travel a clear and uninterrupted road (in whole or in part, as the case may be,) of thirty feet.

5th. Said Company are to pay one half of the expenses of sprinkling said road, and are prohibited from selling, bartering or exchanging, or using said railroad for any other pur-

poses than that of a Street Passenger Railroad. The Company are also prohibited from using in whole or in part any other motive power than that of horses or mules.

6th. All improvements, grading or altering of the road, in preparing the track, to be subject to the control of the township Trustees, and the expense of such improving to be paid by the Company, and also all damages done or caused by any unnecessary delay or obstructions to the road, by the making or using of the track, as well as all damages done by the making or using such track generally, to be paid by said Company.

7th. The cars to start from the western line of Storrs township in time to be at the corner of Fourth and Walnut every morning at six o'clock, and to continue through the day at intervals (from the Two Mile House) of fifteen minutes, and from Sedamsville at intervals of thirty minutes, and from the western line at intervals of thirty-five minutes, until seven in the evening, and from seven in the evening till midnight, to run all through, at intervals of an hour; the regulations with regard to taking up and putting down passengers to be the same as these adopted in Cincinnati, and the fare for adult passengers either way not to exceed five cents.

8th. The work not to be commenced until sufficient stock is taken to complete the road to the western terminus of Storrs township, and the work to be commenced on the eastern end of said township and move westwardly.

9th. The time for confirming these articles to be limited to the first of September, 1859, and the whole road to be completed and in sufficient running order to carry passengers with safety and without delay from the western terminus to the corner of Fourth and Walnut streets, in Cincinnati, in twelve months from the drawing of these articles, or said articles to become null and void.

10th. For the faithful performance of this contract the Trustees of Storrs Township will hold a first mortgage on the road, fixtures and implements of said Company.

11th. This contract to be binding and in force for twenty years, and no alterations except with the consent of both parties.

12th. Residents of Storrs Township not to be allowed to subscribe over twenty thousand dollars, and no one individual resident of said township shall be privileged to subscribe over five thousand dollars.

13th. For the purchase money of the right of way, the said Cincinnati Street Railroad Company has executed to the said Trustees of Storrs Township three several promissory notes, all dated August 25th, 1859, for twenty-three hundred and thirty-three and thirty-three one hundredths dollars, each payable in one, two, and three years, respectively, with interest, and signed by J. L. Vattier, President of the Cincinnati Street Railroad Company, C. J. W. Smith, and others.

If these notes are not paid at maturity, and if any other stipulation of the Company is not complied with, the Trustees reserve the right to declare the contract void, and to take immediate possession of the road, and the company's interest shall be diverted.

Citizens of Storrs Township complain that the Trustees have not taken security for the fulfilment of the contract. From a somewhat hasty examination of it, we are inclined to think it a very loose document, for a matter of so much importance. Section 7, in relation to fare, is peculiarly muddled. We can't understand, from a perusal of it, whether or not five cents is to be the maximum fare for the

entire route, from the Western terminus to the corner of Fourth and Walnut Streets, or whether the five cent arrangement begins at the Two mile House.—*Commercial*.

[From the Cincinnati Daily Times.]

ABOUT MINING AND HOW IT SOMETIMES PAYS.

"He has struck a mine!" is one of these sentences in every one's mouth to indicate extraordinary good fortune. Phrases like these passing into popular, every day use, must originate in some great truth impressed upon the public mind. This expression is doubtless of foreign origin, for Americans know so little of mining, that all enterprises of this kind are by them reproachfully termed *speculative*. Yet, when conducted on correct business principles, and with knowledge, few investments are more certain than those made in this useful branch of industry.

"This statement can now well be believed which has lately been made by the London *Mining Journal*, that 'taking all the investments made in that country (England) in mining enterprises (other than coal and iron) good, bad and indifferent, at home and abroad, the returns from the good mines have paid a larger interest upon the entire outlay, than is realized in any other species of investments.'

"The exact figures are, for mining an annual interest of 13½ per cent. Other investments 4-8-10 per cent. Amount of dividends paid upon investments in mining, 111 per cent.

"This is doubtless owing to the fact that in England mining is treated as a regular business, and is never undertaken by those who are not willing to devote the same attention, time, and money to it, that are considered necessary to the success of any other business."

We have before us a list of twenty-three English Mining Companies, showing, first, the number of shares of each; 2d, the cash cost per share; 3d, the present selling price per share; and 4th, the amount paid in dividends per share. The mines worked are principally copper and lead.

From this list we gather the following facts, which we express in round numbers: These twenty-three companies invested in their enterprises one million and forty thousand dollars. The present value of their property is eight millions of dollars. The shareholders have received in dividends fourteen millions of dollars. The average cost per share was sixty-five dollars. The present selling price per share is five hundred and two dollars; and the amount of dividends received per share, eight hundred and seventy-three dollars.

What other branch of industry will average such returns as these? And is it not owing to the *ignorance* of the business men of the United States as to the actual *facts* of mining, when legitimately pursued, that has, in a measure, prevented our industry from being partly directed in that channel?

THE MOST SUCCESSFUL GROUPED.

From the list we group some of the most successful of the mines, arranging the statistics so that they can be seen at a glance. They dwarf by comparison all ordinary investments by the immensity of their returns.

Jamaica, Lead Mine. No. of shares, 76. Amount paid per share, \$19. Present price

per share, \$250. Total amount paid in, \$1,444. Present value, \$190,000. Increase value on original investment, *thirteen times*.

Wheal Basset, Copper. No. of shares 512. Amount paid per share, \$25 25. Present price per share, \$2,050. Total amount paid in \$12,800. Present value, \$1,049,600. Increase in value, *eighty times*.

South Coradon, Copper. No. of shares, 256. Cost per share, \$12 30. Present price per share \$1,500. Total amount paid in, \$3,200. Present value, \$384,000. Increase in value, *one hundred and twenty-two times*.

Wheal Buller, Copper. No. of shares, 256. Amount paid per share, \$25. Present price per share \$3,095. Total cash capital, \$6,500. Present cash value, \$72,000. Increase value, *one hundred and twenty-four times*.

Devon Great Consols, Copper. No. of shares, 1,024. Amount paid per share, \$5. Present price per share, \$2,050. Total cash capital, \$5,120. Present cash value, \$2,099,200. Increase value per share, *more than four hundred times*.

Taking the above five mines together, and the sum of the original cash capital paid in by the stockholder was, in round numbers, *seventy-nine thousand dollars*, and the present combined value of the investments, reckoning them at the present selling price of the shares, is over FOUR AND A HALF MILLION OF DOLLARS.

Since the foregoing was written, later statistics than those have come to hand from Gryll's Annual Mining Sheet, containing statistics of the Copper Mines of Cornwall for the year ending June 30, 1859.

It appears from these that during the past year the last mentioned mine—the "Devon Great Consols," turned out 23,748 gross tons of copper. On the 1st of June last, (three months back) the lucky shareholders received as their annual dividend \$220 per share. That is mine stock worth having; it cost only \$5 per share, fifteen years ago, when the mine was first opened.

It is true these are the successful mines. Mines to be placed in this class must be either ordinary mines managed with great skill, or exceedingly rich mines, which possess naturally such treasures, that they eventually yield immense returns in spite of all blunders in management.

THE LAKE SUPERIOR MINES.

Some of our Lake Superior mines are of this class of naturally rich mines. The Cliff Mine cost the shareholders \$111,000, or \$18 50 per share, and it has paid \$900,000 or \$150 per share in dividends. The Minnesota cost the shareholders \$66,000, or \$3 30 per share in cash. The shares now sell for \$120, which, on the 20,000 shares, gives the present value of the capital \$2,400,000. From 1852 to 1858, this mine paid the stockholders more than a million of dollars in dividends.

SILVER MINES IN MEXICO.

In relation to the original capital applied to the working of silver mines in Mexico we have no statistics. Results are all we can give. Yet, in many cases, gigantic fortunes were made from mines on trifling amounts originally expended. Such mines paid from the very start, and were of themselves perfect *mints*, from whence to draw all the capital needed to develop them.

The *Saint Eulalia Mine*, near the city of Chihuahua, in Mexico, in the 86 years prior to 1791, yielded a total of over one hundred million of dollars.

The mine of *El Paredon* in Mexico, at different intervals from the year 1793 to that of

1810, produced in eight months, though not consecutive months, eleven millions of dollars.

On the Western slope of the Cordilleras, in Mexico, in the days of the old Spanish regime, a single miner named Zaubrano, extracted silver upon which he paid into the Royal treasury \$11,000,000, according to the law, as the King's Fifth. *Fifty-nine millions of dollars*, as the results the operations of one man in his life time shows that with him silver mining was certainly not in a pecuniary sense a losing business. It probably ruined his children! His girls doubtless married fortune hunters; and his boys must have been of "the mile in one and twenty" sort.

We need not go to past days for great results. The Real Del Monte mine in the mountains, a days journey from the city of Mexico, yielded in the year 1857 by the report of Mr. Buchan, the manager, three millions and thirty thousand dollars. The general average of the ore was \$52 per ton. The number of tons of ore reduced was the enormous quantity of 58,412, on which the net profits to the stockholders exceeded that year one and a half million of dollars!

SILVER MINING IN ARIZONA, OR THE "GADSDEN PURCHASE."

The discovery of the Heintzelman Silver mine was made in January, 1857, by the Engineers of the Sonora Exploring and Mining Company, the pioneer of the American Mining Company in Arizona.

They named the mine in honor of the President of the Company, Major S. P. Heintzelman, of the Army. This gentleman, about the year 1854, had been sent by the government to that country to build a fort—now known as Fort Yuma—at the junction of the Colorado and Gila Rivers.

ORIGIN OF THE PIONEER SILVER MINING COMPANY.

While thus engaged, a party of explorers one day came into the Fort and were hospitably entertained by the Major. Their leader was Charles D. Poston, a young Kentuckian, of Hardin County in that State, who had been at his own expense exploring the mineral resources of Arizona. He entertained the Major with the narrative of some narrow escapes of himself and men from the prowling Apaches—those undeveloped savages who have not even, as yet, got beyond the bow and arrow. What was more to the purpose, he showed the Major some brilliant specimens of silver ore which he had discovered.

PARTY OF EXPLORERS SENT OUT FROM CINCINNATI.

Subsequently, Major Heintzelman was ordered to the command at Newport Barracks, Kentucky, and Mr. Poston also came to the States and attempted unsuccessfully to enlist parties in various Eastern cities in his mining project. At length, by the advice of the Major, he came to Cincinnati—this "place in the woods," as some good people to this day believe, although we have got an opera house. Here a few gentlemen, looking through telescopes of great focus, were induced to advance the funds to send out a regularly organized exploring party, on *what was considered by "the know nothings"* a wild goose errand, to hunt for silver mines in Arizona. This was in 1856.

The party went out overland, and arrived in the fall of that year, and commenced vigorously exploring. In the succeeding January, as previously mentioned, they made the splendid discovery which fixed, beyond contingencies, the ultimate good fortune of

the expedition. Literally, they had "struck a mine!"

Its exceeding richness at once led them to abandon the other mines of reputation in that vicinity, and concentrate their energies upon that alone. The unfortunate filibustering expedition of Crabb into Sonora ensued shortly after, and blighted the operations of the party for the remainder of the year. In fact, Poston and his men came near perishing from starvation. About this period, anxious inquiries were made of the telescopic gentlemen of Cincinnati as to "how soon they expected dividends?"

The next year, 1858, was passed in erecting buildings, opening the mine, and putting in readiness the amalgamation works for reducing the silver from the ores. This last was not even partially effected until March, of 1859.—Monstrous difficulties had been met and overcome, and the enterprise is now on a firm basis. When they went out, Arizona was a wilderness, with scarcely a white man on its whole surface, of 3,600 square miles. Now, half a dozen mining companies are at work with a garrison of U. S. troops in their midst to protect them against the thieving Apaches, and the great California Overland Mail Route running through the territory semi-weekly, gives constant communication with San Francisco in seven, and with Cincinnati in sixteen days. This last is about the time it took to send a letter from Boston to St. Louis, prior to the era of railroads.

PRESENT POSITION OF AFFAIRS AT THE HEINTZELMAN.

With the miserable mule power in use at the Heintzelman, the Reduction Works now yield \$1,200 only in silver per week, which a little more than pays all expenses. With the two steam engines making, and soon to be sent thither, it is estimated by the German mining engineers in charge, they will be enabled to turn out daily double that amount; and more in time, as more and more room will be given to work the mine by the increased operations of the miners.

The mine has now been opened to the depth of 100 feet. *Virgin silver* was found at the 60 feet level, in June, 1859. The ore thus far reduced gives the average yield of \$282 per ton. No other silver mine in the world can compare with this. The vein is traced on the surface for a great distance—it is broad and regular, and like a huge, carried up wall, doubtless penetrates thousands of feet into the earth, to furnish ores to the industry of man for, perhaps, centuries.

ARITHMETIC "BROKE LOOSE."

If, at some future day, as large an amount of ore should be reduced and mined as was at the Real del Monte, in 1857, viz: 58,442 tons, it would give, at these rates, the unprecedented yield of more than sixteen millions of dollars! an amount of silver so great that our courage scarce suffices to drop it, even on paper, from the golden point with which we write. Such a result is not likely ever to occur. It would be deplorable, causing the enlargement of lunatic asylums, to accommodate too suddenly elated stockholders.

WHAT CALIFORNIA HAS DONE AND ARIZONA MAY DO.

If, in 1849, some enthusiast had uttered the prediction—now, in 1859, verified by the result—that he "should not be surprised if, in the coming ten years, California should yield five hundred millions of dollars in gold," you and I would, on impulse, have glanced about for a

straight jacket for his benefit. Yet California is nearly doubled upon by Australia, which, in the past year, yielded ninety millions in gold!

Arizona is thought to be the richest silver bearing district on the face of the earth. No one, acquainted with the facts, would venture the opinion that its yield in silver to the industry and enterprise of us money-loving Americans will not in time equal that of the gold of California, especially in view of the *great discoveries now perfecting in the cheap and easy reduction of silver from its ores*. These will greatly enhance the value of even ordinary mines, and perhaps be the means of restoring the equilibrium of production between silver and gold.

SOME THOUGHTS UPON CROAKERS.

This is not an age when it is peculiarly handsome in one to shrug his shoulders and look hypocritically wise in distrust of a probable future. Our day is too full of wonders for that—a day in which the world, just out of its babyhood, with the Millenium, in our opinion, a tremendous distance ahead, has just kicked off its swaddling clothes, and now, fairly leg-loose, is beginning to make some few strides, just to show what it will be able to do after a little more time has elapsed, and it gets on a stronger diet!

Who shall predict where we shall "bring up?" The croaker may be "native born" and so secure an unfailing passport from Mr. Cass when he starts on "the grand tour." But he is a native by accident only. Truly is he a "foreigner," never to be "naturalized" by any Court above or below, to the onward movement of this American people, and to the times in which they are photographing themselves on the long scroll of "the ages."

WHAT A SENSIBLE MAN WOULDN'T DO.

Still no sensible man would make an investment in newly formed enterprises, calculating to pay notes already given from the proceeds of dividends. It should be done, if at all, on the principle of "making a spoon or spoiling a horn."

On the great success which is very certain to accrue to some of the pioneer companies in Arizona, doubtless more money will be lost to our people in the silver mining mania, that will arise, and culminate, in many cases, in ill-judged and ignorantly managed mining schemes, than our South Carolinian, Gadsden, originally paid Don Lopez D. Santa Anna for the whole territory, viz: ten millions of dollars!

Among these sufferers, we venture the guess, will be some of those who this day volunteer the opinion that they "*wonder such a sensible man as Mr. ——— (the writer of this,) should interest himself in a mining project away off in Arizona.*"

The collective opinions of the thousand men who daily meet and talk on 'Change, upon any subject they have not examined, is utterly valueless, when compared to the opinion of one single man, of fair capacity, who, with superior advantages for ascertaining facts, has, with long continued, unremitting industry, closely examined it with an especial view to ascertain, not only the favorable, but more especially every weak point bearing upon it—"Don't tell me the advantages of your invention," said Professor Silliman to a mechanic who was showing him a machine. Give me the *objections* and how you remedy them; this accomplished, the rest is easy. Wise philosophy that, for it applies to every human undertaking.

ENGLISH RAILWAY NEWS.

TRAFFIC RECEIPTS.—The traffic returns of railways in the United Kingdom for the week ending July 2, amounted to 514,190 $\frac{1}{2}$ and for the corresponding week of 1858 to 479,560 $\frac{1}{2}$, showing an increase of 34,630 $\frac{1}{2}$. The gross receipts of the eight railways having their termini in the metropolis amounted to 222,130 $\frac{1}{2}$, and for the corresponding week of last year to 211,418 $\frac{1}{2}$, showing an increase of 10,712 $\frac{1}{2}$.

FRENCH AND ENGLISH RAILWAY RECEIPTS.—It appears that the receipts for the half year ending the 1st inst., on the Paris, Lyons, and Mediterranean Railway, amounted to 49,180,415 $\frac{1}{2}$ (1,967,217 $\frac{1}{2}$), and for the corresponding period of 1858 to 36,788,608 $\frac{1}{2}$, showing an increase of 12,391,807 $\frac{1}{2}$ (495,672 $\frac{1}{2}$). The receipts on the Paris and Orleans Railway amounted to 31,012,055 $\frac{1}{2}$ (1,240,482 $\frac{1}{2}$), and for the corresponding period of 1858 to 26,835,154 $\frac{1}{2}$, showing an increase of 4,176,901 $\frac{1}{2}$ (167,076 $\frac{1}{2}$). The receipts on the Eastern of France Railway amounted 28,044,164 $\frac{1}{2}$ (1,121,646 $\frac{1}{2}$), and for the corresponding period of 1858 to 24,790,447 $\frac{1}{2}$, showing an increase of 3,253,717 $\frac{1}{2}$ (130,028 $\frac{1}{2}$). The receipts on the North-Western of France Railway amounted to 26,792,062 $\frac{1}{2}$ (1,071,612 $\frac{1}{2}$), and for the corresponding period of 1858 to 25,455,081 $\frac{1}{2}$, showing an increase of 1,336,981 $\frac{1}{2}$ (53,479 $\frac{1}{2}$). The receipts on the Western of France Railway amounted to 22,646,901 $\frac{1}{2}$ (905,876 $\frac{1}{2}$), and for the corresponding period of 1858 to 19,113,973 $\frac{1}{2}$, showing an increase of 3,532,928 $\frac{1}{2}$ (141,329 $\frac{1}{2}$). The receipts on the Southern of France Railway amounted to 10,756,589 $\frac{1}{2}$, and for the corresponding period of 1858 to 7,272,080 $\frac{1}{2}$, showing an increase of 3,484,509 $\frac{1}{2}$ (130,380 $\frac{1}{2}$). The total receipts of those six companies' amounted to 168,429,186 $\frac{1}{2}$ (6,737,167 $\frac{1}{2}$) for the first half of the year 1859 on 4,867 miles of railway, and for the corresponding half of 1858 to 140,255,043 $\frac{1}{2}$ (5,610,202 $\frac{1}{2}$) on 4,425 miles of railway, showing an increase of 28,174,143 $\frac{1}{2}$ (1,126,965 $\frac{1}{2}$), or 20.09 per cent. over the corresponding period of 1858. The above receipts for the past half year on six lines amount to rather more than the receipts on nine English railways—namely, the London and North-Western, the North-Eastern, the Midland, the Great Western, and Shrewsbury lines, the Lancashire and Yorkshire, the Eastern Counties, the London and South-Western, the London, Brighton, and South Coast, and the North Staffordshire, on an aggregate mileage of 4,342 miles, against 4,218 miles at the corresponding period of 1858; the total receipts on those lines being 6,631,162 $\frac{1}{2}$ for the past half year, against 6,277,057 $\frac{1}{2}$ at the corresponding period of last year, showing an increase of 354,105 $\frac{1}{2}$, or 5.64 per cent.

RAILWAY AND MINING SHARE MARKET.—LONDON.

MONDAY, July 11.—The railway market improved in the morning with consols, but some sales caused a partial reaction. At the close, however, most of the principal home stocks were $\frac{1}{2}$ to 1 per cent. higher than on Saturday, the only exceptions being Sheffield and North British. French shares were firm at the improved prices attained after regular hours on Saturday. Bahia, Dutch-Rheinish, Great Luxembourg (at 6 $\frac{1}{2}$ to $\frac{3}{4}$), and Pernambuco were again higher. Lombardo-Venetian new, after touching 2 $\frac{1}{2}$ premium, left off 1 $\frac{1}{2}$ to $\frac{3}{4}$ premium, and the old 1 $\frac{1}{2}$ to 2 premium. Mines were dull, but with a stronger tendency.

TUESDAY, July 12.—The railway market was steady during the regular hours of business, but after the official close experienced an important advance on the announcement that

peace had been concluded between France and Austria. In colonial descriptions several of the Indian guaranteed lines and Ceylon show an improvement. Two or three foreign railways, especially Dutch-Rhenish, were also higher, while Pernambuco declined to 2 to 1½ discount. Mines were inactive, and in some cases, particularly East Wheel Russel, a reduction has taken place.

WEDNESDAY, July 13.—The share market have again improved. English railway stocks closed 1½ to 2½ per cent. higher, Great Northern, Caledonian, South-Eastern, and Berwick showing the principal advance. After the usual hours of business there was a tendency to a further advance. In colonial descriptions Indian guaranteed were firmer. In foreign shares there was an improvement in Paris and Lyons, Southern of France, Dutch Rhenish, Great Luxembourg, and several other less important lines. In American securities the bonds and shares of the Illinois Central and New York Central, and the bonds of the Michigan Central, and New York and Erie, have advanced. Mines were dull, but with some exceptions the tendency was towards increased strength.

TUESDAY, July 14.—The railway market was heavy, especially after official hours, and nearly all the leading English stocks closed at a decline. Mines were inactive.

FRIDAY, July 15.—A very moderate business has been transacted in the railway share market, and prices have receded to the extent of about ½ to 1 per cent.—*London Economist*.

PITTSBURGH, COLUMBUS & CINCINNATI RAILROAD.

THE CONDITIONS UPON WHICH IT PASSED INTO THE HANDS OF A RECEIVER.

The Harrison county (Ohio) District Court, Judge Bostwick Presiding, appointed Thomas L. Jewett, the President of the Pittsburgh, Columbus and Cincinnati Railroad, Receiver of the same, who gave the necessary bonds, and immediately entered upon the duties of his office. The Court, among other things, ordered

That the net proceeds of the business to be prosecuted and carried on by said receiver, pursuant to this order, shall be applied as the same shall arise, to the following uses, in such order as to the said receiver shall appear to be necessary or most expedient:

1st. To the payment of balances due for labor performed, and materials and supplies furnished to said company in the prosecution of its business and the necessary repair of its road, at any time since the 1st day of January last, and for balances which may be due to connecting or other roads.

2d. To the payment of all sums due for moneys borrowed to pay interest upon the mortgage debt, or to pay for labor or materials for the repayment of which, any former or present officers of the company, or other person, at his instance, is surety.

3d. To the payment of all sums advanced or loaned for like objects, by any former or present Director of the company, and which have, in good faith, been so applied.

4th. To the payment of attorneys' fees for services rendered for the present complainants, in suits pending or terminated at the filing of this bill, and for like services for the company.

5th. For the payment of all legal taxes as-

sessed or to be assessed against said company, remaining unpaid and to accrue.

6th. To the payment of balances due for the right of way for said company's road; with power to said Receiver—subject to confirmation by this court—in cases where the amount due for such right of way has not been ascertained heretofore, to compromise and settle the same.

7th. To the payment of all liabilities of persons who have, at the instance of said company, or the complainant, become sureties for the company or the complainant in the prosecution or the defense of suits, whether upon appeal bond, replevin bonds, injunction bonds, or other obligations or undertakings, the object of which was to protect the property of the company against claims asserted by third persons, to the injury or prejudice of the complainants and others, as creditors thereof.

8th. To refund to the Pennsylvania Railroad Co., R. Garrett & Sons, R. J. Ross & Co., Barcroft, Beaver & Co., Meyers & Stucker, Jer. Wilbur, Hen. M. Alexander and Saml. T. Canby, the moneys heretofore advanced and paid by them respectively for the purpose of paying interest on the mortgaged debt of said company, and furnishing materials to operate said road; and all securities of whatever name and character held by any party liable for any of the claims covered by the second, third and eighth articles above mentioned.

The Receiver is authorized to complete the conditions of the contract with the Western Union Telegraph Company for building and paying for a single telegraph line along said railroad for the convenience and successful operation of the same, between Steubenville and Columbus, Ohio.

The salary of the Receiver is fixed at thirty-six hundred dollars per annum.

IMPROVED DUMPING TIP.

A patent was issued several weeks since to a prominent coal operator of this county for an improved tip or dumping truck, calculated for coal-dirt and railway embankments. It is very simple in its construction, costs but little, and may be built by any ordinary colliery or railway blacksmith. It combines a great many advantages for use, especially at our collieries, and is deserving of the consideration of our operators.

The dump or tip operates equally well with any style of ordinary drift or slope cars. It consists of a four-wheeled trucks, say a foot wider in gauge than the cars used, upon which revolving around a pivot or bolt, and supported by several small plain wheels, is a platform with rails, and a pole rigged to an axle like the tip of a breaker. This track rests upon a railway, on the embankment, laid at such depression from the main or summit track as will correspond with the height of the truck. The car is run from the main track upon the truck, which may be pushed forward on its railway to the end of the embankment, when the contents may be tipped in any direction. These are among the advantages of the arrangement: Any kind of car may be used, consequently the expensive tipping cars may be dispensed with; slate or dirt coming out of the slope or drift is unloaded expeditiously and without shovelling, and the car is quickly ready for further service; the embankments instead of running out to a great distance, of the width of the truck, as is the case when dirt is tipped but one way, by this tip are made broad, requiring less railway and covering a smaller extent of surface; there is a great

saving in the number of hands needed on the banks.

This tip is in operation at the Heckscher-ville collieries, where it gives great satisfaction, and has already saved much money. Those interested in mining would do well to examine it, as our description must be to a great many very imperfect. Its use in the construction of railway embankments would, we think, be advantageous. This ingenious invention we owe to David Glover, Esq., of Woodside, in this county, to whose skill as a practical coal mine manager, and ingenuity as an inventor, this region is already much indebted. His safety cage, to which we have before alluded, has proved a perfect success wherever used. Parties interested in securing the dumping tip, can see it in operation as above stated, or gain all necessary information from Mr. Glover, or Thomas Wren, Esq., of the Washington Iron Work, Pottsville.—*Pottsville Mining Record*.

MONETARY AND COMMERCIAL.

We are heartily tired of chronicling the weekly change of the money market from "easier" to "tight," and back again. Cincinnati, with an export trade of \$100,000,000, and a population of 250,000, is more destitute of banking capital than almost any little one horse town of 5,000 inhabitants in the interior of any of the eastern States, and if two or three of our merchants have occasion to use \$5,000 or \$10,000 each extra in the same week, then are we called upon to inform the world that the "money market is tight." Such is again the case this week. In the language of a cotemporary, "matters were closer to-day than they have been for several months, or we might say for a year past." This state of affairs, changing as often as the wind, is simply a burlesque on the "money market." Quotations the same as before for inside rates, but outside rates are looking up.

Eastern Exchange is freely furnished at ½ prem., the buying rate being 40.

Relative to money matters in New York, the *Courier and Enquirer* of last Tuesday, says:

The Money Market remains easy, with ample supply of capital at 6@7 per cent. on call, and 7 per cent. on prime bills.

The Bank Statement for the past week indicates a tendency to expansion. With less specie than was held two months ago, and with Foreign Exchange against us, the Bank loans have increased, the changes in the leading items being:

In Loans, an increase of.....	\$237,000
In Specie, an increase of.....	288,000
In Circulation, an increase of.....	139,000
In Deposits, an increase of.....	518,000

The increasing activity in trade is shown in the aggregate exchanges at the Clearing Houses, which are twenty millions per day, against seventeen or eighteen millions in July and August.

Four of the Banks report over 40 per cent. of their cash liabilities in specie; eight have over 30 per cent., and twenty-three have over 25 per cent.

The full prices obtained last week at the Stock Board are not fully realized this morning. Virginia sixes have receded to 94½; Missouri, 84½; N. Y. Central is in favor at 97½, with a good demand. Second Avenue Railroad brought 103½; Galena and Chicago, 75.

A more spirited movement took place at the Second Board, when New York Central advanced to 79½. There was a better feeling after the adjournment.

Compared with Saturday's closing cash sales, we note an advance in New York Central Railroad Shares ½; Galena and Chicago, 1½; and a decline in Reading ½; Michigan Southern, 1; Cleveland and Toledo, ½; Chicago, ¼; Pacific Mail, 2.

The aggregate receipts at tide water of Flour, Wheat, Corn, and Barley, through the New York avenues up to the close of the first week of Sept., for the years 1858 and 1859, have been:

Year.	Flour, bbls.	Wheat, bush.	Corn, bush.	Barley, bush.
1859.....	1,087,400	5,350,100	3,458,900	410,610
1859.....	222,300	812,400	1,780,100	163,800
Dec.....	856,100	4,537,700	1,723,100	246,800

Reducing the Wheat to Flour, the deficiency of the receipts in 1859 is equal to 1,772,640 bbls. Flour.

The total amount of the bonded debt of San Francisco is \$3,087,600.

The exports of Specie from New York for the week ending September 10, were \$2,363,385 36, and the total for 1859 \$51,956,845 30.

STATISTICS OF OHIO—GRAIN.

The table of small grain below (produced in Ohio for 1858,) was prepared under the law creating the Bureau of Statistics.

THE GRAIN CROP OF OHIO.

Tabular statement of the number of acres employed in the cultivation of Rye, Barley, and Hay, and the amount raised in Ohio in 1858, as returned to the Auditor of State by the Township Assessors:

Counties.	RYE.		BARLEY.		HAY.	
	Acres.	Bush.	Acres.	Bush.	Acres.	Tons.
Adams.....	96	1230	456	5669	562	10727
Allen.....	425	4798	226	3253	9137	5907
Ashland.....	2255	29302	2363	54501	22453	29721
Ashtabula.....	1008	11630	410	4329	51264	69804
Athens.....	89	734	29	351	12219	17058
Auglaize.....	1104	10588	1751	34409	7195	9503
Belmont.....	1174	10168	3485	53211	17418	22471
Brown.....	488	3592	1215	19321	6389	6496
Butler.....	206	2190	17388	384965	6556	7867
Carroll.....	4709	38027	1017	15195	17031	2337
Champaigne.....	1070	10050	949	21595	13348	19146
Clark.....	1528	15861	1323	22666	13379	18515
Clermont.....	651	5534	1385	19378	12441	13151
Clinton.....	129	1168	768	12966	9742	12167
Columbia.....	4569	41623	2211	33493	26318	41201
Coshocton.....	4410	43219	1532	16710	15716	18355
Crawford.....	794	12691	13691	670	18223	29634
Cuyahoga.....	1332	15772	150	3919	39225	51078
Darke.....	2620	15393	1911	27839	10706	18443
Defiance.....	335	3246	96	1092	7304	9043
Delaware.....	425	3688	786	13366	18189	24787
Erie.....	365	4396	1241	16771	11339	18490
Fairfield.....	1420	9547	2086	34934	14064	19183
Fayette.....	809	7616	195	1473	9132	10631
Franklin.....	493	3555	1076	14658	14328	18512
Fulton.....	944	10025	269	4978	13354	19630
Gallia.....	67	617	62	1039	6988	8028
Geauga.....	457	4981	474	5077	39761	51211
Greene.....	321	3306	5902	4151	9107	11873
Guernsey.....	1267	9765	778	9715	17040	18536
Hamilton.....	124	1425	12151	106874	8278	10841
Hancock.....	779	7627	344	5662	14109	18260
Hardin.....	598	5849	73	728	7483	10003
Harrison.....	1749	11629	1028	15949	16732	21902
Henry.....	217	1492	73	708	3708	4794
Highland.....	116	1063	159	2181	13483	14105
Hocking.....	303	2160	97	1691	5333	9119
Holmes.....	3500	37109	1948	31707	17163	21981
Huron.....	633	5117	1531	18290	26829	25753
Jackson.....	37	410	1	12	7654	8914
Jefferson.....	2111	26294	5638	94135	15833	29215
Knox.....	3745	35783	790	12633	19249	24274
Lake.....	548	6515	1209	14553	17094	23573
Lawrence.....	53	513	1	2	2712	3372
Licking.....	1738	17314	1755	19033	27635	37702
Logan.....	632	5917	549	9233	13930	17487
Lorain.....	544	6487	466	6359	34633	49451
Lucas.....	480	5071	593	6614	9435	11803
Madison.....	705	6233	307	1386	12169	16057
Mahoning.....	1708	17093	1699	23382	28994	46798
Marion.....	403	3516	165	2972	14713	19826
Medina.....	1029	13370	1225	18577	30155	46592
Meigs.....	82	606	37	545	4775	19043
Mercer.....	1308	10385	941	16767	7050	8321
Miami.....	1551	14160	5083	6042	8692	9877
Monroe.....	345	2658	234	3162	10469	10734
Montgomery.....	1357	4568	3343	75514	7786	8887
Morgan.....	132	889	705	7446	13103	16980
Morrow.....	622	6193	604	10446	20887	29369
Maskingum.....	2421	22547	1549	19789	21225	23299
Noble.....	114	697	53	499	9171	14247
Ottawa.....	41	314	28	433	3782	6253
Paulding.....	163	1141	15	75	1670	2154
Perry.....	530	3977	579	10403	12545	14963
Pickaway.....	3-8	3662	115	1215	7010	8190
Pike.....	220	1287	4	3	3302	3734
Portage.....	11-3	12771	1669	22369	41414	59357
Putnam.....	262	3710	4490	53028	6907	7992
Richland.....	496	6161	77	1155	6881	7666
Ross.....	3814	51828	3591	87641	23436	31463
Sandusky.....	687	7320	242	2686	7039	9886
Scioto.....	543	5478	325	4725	15537	20608
Seneca.....	29	224	19	311	3686	5012
Shelby.....	926	10879	1268	26292	26913	32716
Stark.....	1204	10512	1296	16707	7605	8677
Summit.....	1426	17690	5011	101395	33771	47310
Trumbull.....	1066	14495	1824	35083	26514	41444
Tuscar's.....	2367	15970	203	3168	31947	76757
Union.....	4423	36732	1455	18975	20606	27776
Van Wert.....	521	4919	113	1649	12828	17442
Vinton.....	317	2315	139	2968	4942	6503
Warren.....	71	454	8	140	6652	8078
Washington.....	299	2675	8284	139007	8129	9637
Wayne.....	424	3408	61	711	15192	19180
Williams.....	1363	16488	2247	28901	31078	42621
Wood.....	1441	12659	159	2021	12115	16946
Wyandotte.....	517	4856	273	3981	10889	14594
Wyandotte.....	810	9826	274	2839	13545	18617

Total..... 90191 874543 125765 2103199 1357874 1866465

AVERAGE YIELD PER ACRE.

Rye.....	9 32-46 bushels.
Barley.....	16 34-47 "
Hay.....	1 66-100 tons.

OPENING OF THE BURLINGTON AND MISSOURI RIVER ROAD.—The formal opening of the road from Burlington to Ottumwa was celebrated with great enthusiasm on Thursday last. The Chicago Times, in giving an account of the festivities, says:

This new and important line of road, now connecting the navigation of the Mississippi River with the most fruitful portion of this agricultural State, has its eastern terminus opposite Burlington, in Illinois, and runs in a westerly direction to Ottumwa, having a charter to construct a road to the Missouri River, a distance of two hundred and fifty miles beyond its present western terminus. The line is well located, crossing the State at all its most favorable points and bearing an independent course among the natural avenues of trade in Iowa, intercepting the business of the Iowa Central Line in its course to the Missouri River by a shorter and more convenient route.

The cost of the road has been about \$30,000 to the mile. Its present length is seventy-five miles, of which long intervals are ballasted with broken stone, and it is intended to ballast the whole of it with that valuable material, which is obtained in the neighborhood of Skunk River, a bluff and stony section of the State. Ballasting is being pushed forward as rapidly as possible along the entire line, and already the road has an appearance of soundness which reminds us of the best portions of the Pennsylvania Central track.

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANA OR SANDOVAL

FOR

Decatur, Springfield,
Bloomington, Peoria,
Burlington, Quincy,
La Salle, Rock Island,
Dixon, Galena,
Prairie du Chien, St. Paul, and
St. Anthony,
And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections twice daily, at PANA for all the above points. Connections also made with OHIO AND MISSISSIPPI R. R. with T. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via PANA OR SANDOVAL AND ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,
Gen'l Southern Agent, Cincinnati.
W. P. JOHNSON,
Gen'l Passenger Agent, Chicago.

MOSELEY'S

WROUGHT IRON

ARCH BRIDGES

—AND—

Corrugated Iron Roofs.

ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.
Spt. 2. MOSELEY & CO.

June 21, 1859.

Cincinnati, Hamilton and Dayton



RAILROAD.

FOUR TRAINS

LEAVE THE SIXTH STREET DEPOT DAILY.

TRAINS RUN THROUGH TO RICHMOND, LIMA, SANDUSKY, AND DELAWARE WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND NORTH-WESTERN CITIES.

(Columbus time, which is seven minutes faster than Cincinnati.)

6 A. M. EXPRESS TRAIN—For Cleveland and Pittsburg, via Delaware, makes close connection at Crestline for Pittsburg, Baltimore, Philadelphia, and New York; and at Cleveland for Dunkirk, Buffalo, Boston and New York. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima, Port Wayne and Chicago, reaching Chicago at 7:20 P. M., Quincy and Galena at 7 A. M. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Muncie. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

S. A. M. MAIL TRAIN—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STEAMER FOR DETROIT; at Forest with Pittsburg, Port Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at DELAWARE with the C., C. and C. Road, for Cleveland and points East. Also connects with Junction Railroad at Hamilton for Oxford.

4:30 P. M. TRAIN—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburg, Port Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Also, connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago. Also connects with Junction Railroad at Hamilton for Oxford.

6 P. M. TRAIN—For Dayton, Troy, Piqua, Sidney, Lima, Port Wayne and Chicago, reaching Chicago at 8 A. M.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; at the new Ticket Office on West side of Vine street, between the Post Office and the Burnet House; or at the Sixth Street Depot.
D. McLAREN, Superintendent.

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circular which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the retort is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a while heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet,.....	\$300 00
do do do 350 ".....	335 00
do do do 400 ".....	375 00
do do do 500 ".....	450 00
do do do 600 ".....	525 00
do do do 700 ".....	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, as now in operation in several States, apply to

R. T. COVERDALE,

167 Walnut Street, Cincinnati, Ohio,

who has the exclusive right to manufacture and sell in the State of Ohio.

Feb. 24th, 1859.

APPLEGATE & CO.,
Booksellers, Publishers, Stationers & Blank Book Manufacturers,
43 Main St. Cincinnati, O.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Booksellers, Country merchants, and others to our extensive stock of School, Classical, Theological, Standard, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the principal publishers, as well as our own manufacturing of Paper and Stationery, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

BOOKSELLERS,

Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, and Tea wrap-boards, Envelopes, Penholders, Copying Books, Ink and Scales, Sealing Slates, Mucilage, Book rests, Bill envelopes and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files: Date Calendars, together with all other articles used in the counting-house.

Stationers,

To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly paged, including all sizes, from the small memorandum book to the large Super-Royal and Imperial bound in a great variety of styles and workmanship, order of any description, with or without binding and warranted to be in quality of paper, accuracy of ruling and durability of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

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We are prepared to Print and Bind books in any style desired, at rates as low as quality of work cut in this where. Our executing these branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Cards, Circulars, or tion of printing, will that we do such jobs despatch. Orders re-

Stereotype, of any description that may be desired, can be executed by our facilities for branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Cards, Circulars, or tion of printing, will that we do such jobs despatch. Orders re-

Publishers,

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, *Clarks' Conferences*, *Dick's Works*, *Lin's Ancient History*, *Platarch's Lives*, *Josephus*, *Spectator*, *Chain of Sacred Wonders*, *Familiar Science*, *Webb's Monitor*, *Soden's German*, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

3 MAIN STREET CIN.

W. HARVEY'S SAFETY JOINT

For Coupling the Ends of "T" Rails.
PATENTED, NOV. 2, 1858.

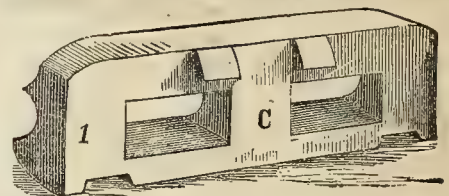


Fig. 1 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

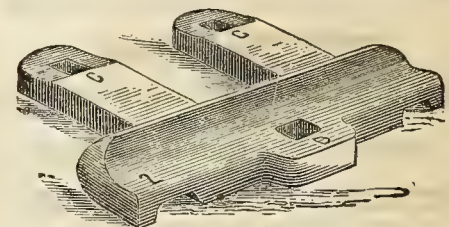
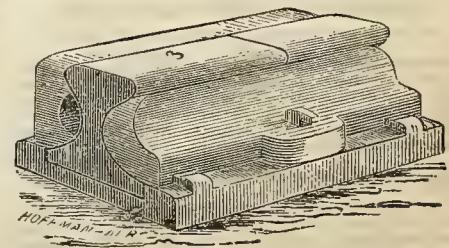


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and d slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that one part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly free road, thereby doing away with the breaking of rails, wheels, and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear of the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
41 Jefferson-street, Albany, N. Y.
T. WRIGHTSON, AGENT, Cincinnati, O.

PROSSER'S PATENT
ORIGINAL LAP-WELDED
IRON AND STEEL BOILER TUBES,
SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

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DENSERS for high pressure steam, with sea or
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WITH OR WITHOUT AXLES.

WHEELS FITTED

To Hammered or Rolled Axles,

In the best manner, at the shortest notice, and on the
Most Reasonable Terms.

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This work has been carefully compiled and corrected by
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Mar 10/60

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important improvements, at a reduction on former prices;
and to meet the demand for a good, LOW-PRICED FAMILY
MACHINE, have introduced a new style, working upon the
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highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALIKE ON
BOTH SIDES, impossible to ravel, and leaving no chain or
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1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th
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Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND
Compound Steam Pumping Engine,



WOULD respectfully invite
the attention of RAILROAD
Companies, Manufacturer
Distillers, Miners, and the pub-
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as the best Pump now in use
and acknowledged by all who
have used them to be perfect—
are simple in their construc-
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likely to get out of order; well
adapted for Steamboats, Rail-
road Water Stations, Distille-
ries, Breweries, Miners, Ch-
Mines, Rolling Mills, Paper
Mills, Factories, Wells, Ch-
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all purposes where a Pump can be used. Also, for
forcing a large body of water to a great height or distance
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Also, McGowan's Patent Ball Valve Pump, designed
for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings
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Orders thankfully received and promptly filled at the
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SILVER MEDAL. (The highest prize) awarded
the pump and Steam Pumping Engine at the late Pa-
Ohio Mechanics' Institute. June 18, 1855—1

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co.,
Pennsylvania, are prepared to execute orders for Street and
other Rails on terms favorable to parties wanting to pur-
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FREEDOM IRON COMPANY,

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods,

Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't.

This Iron is all made from best Juniata cold-blast char-
coal Pig Iron, refined with Charcoal in the old-fashioned
Forge Fire, hammered into a Bloom from which Iron is
hammered. The whole operation from ore to finished Iron
is conducted at our own Works. June 9.

New Time Table

OF THE

NEW YORK CENTRAL R. R.

	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp..	7 10 A. M.	7 00 P. M.	7 00 P. M.
Mail.....	9 10 A. M.	12 50 A. M.	
New York Exp..	11 15 A. M.	9 00 P. M.	9 00 P. M.
Night Exp.....	5 00 P. M.	4 00 A. M.	4 00 A. M.
Utica Accom'd..	6 00 P. M.	Ar. U. 10 00 P. M.	
N. Y. Mail.....	11 15 P. M.	10 00 A. M.	10 00 A. M.
	Leave Buffalo.	Leave Bridge.	Ar. Alb'y
New York Exp..	5 15 A. M.	5 15 A. M.	3 30 P. M.
Steamboat Exp..	8 00 A. M.	8 00 A. M.	8 00 P. M.
Mail.....			2 30 P. M.
Cleveland Exp..	6 00 P. M.	6 00 P. M.	4 40 A. M.
Cincinnati Exp..	11 00 P. M.	11 00 P. M.	8 30 A. M.
Utica Accom'd..			10 00 A. M.

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LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive
equal in efficiency and durability to the best Eastern
manufacture. Also, Shaping and Slotting Machines
suitable for railroad shops. Also, all kinds of heavy
forging and casting done at short notice. Also, bolts for
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P. DUDLEY,
President of the Board,

Jan 5th.

The Railroad Record.

E. D. MANSFIELD, } Editors.
T. WRIGHTSON, }

CINCINNATI:
Thursday Morning, Sept. 22, 1859.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.
To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

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THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Circular from the Officers of the Four Lines.—The following circular was agreed upon at the August meeting of the Presidents of the four Atlantic lines, but has not heretofore been published:

“NIAGARA FALLS, Aug. 18, 1859.

“In view of the importance to the Railroad interest generally, of abolishing the system of allowing commissions upon the sale of passenger tickets, and commissions, drawbacks, passenger tickets, or passes to shippers and owners of freight, the Pennsylvania Central R. R. Company, the Baltimore & Ohio R. R. Company, the New York Central Railroad Company, and the New York & Erie R. R. Company, from and after the first day of October next, will not recognize upon the roads of their respective Companies, the tickets of any other Company, or of its agents, which authorizes or allows, directly or indirectly, a commission, in any form, upon the sale of any tickets by, or in behalf of such Company; nor permit, directly or indirectly, any commission for the sale of tickets, or passes, for the procurement of freight, to be paid, or furnish, in any form, on their behalf respectively, or by Lines, or Express Companies, shipping over their roads respectively.”

Marietta and Cincinnati Railroad Meeting Yesterday.

MARIETTA, Sept. 21.

EDS. COM.—The Stockholders' meeting at this place to-day, was largely attended and entirely harmonious in its action. The scheme of capitalization was unanimously adopted. It will reduce the stock and debt of this Company over four and a half millions. The Stockholders, on their part, propose to surrender seventy per cent. of their certificates, over two and a quarter millions.

REVIEW OF THE COMMERCE AND MANUFACTURES OF CINCINNATI.

One of the most interesting and valuable departments of statistics is to trace the commercial and industrial growth of our American cities. It exhibits the progress of society, and indicates with unerring accuracy—not only the growth—but the *kind* of civilization which prevails in the country. It shows—by showing the growth of particular departments of industry—in what consists the *physical* (and, in some measure, the intellectual) *wants* of society. This will indicate whether there is a social, and intellectual, and a moral progress, or whether the progress of luxury is so great as to overcome the morals and stability of society. This would be shown by a perfect system of commercial and industrial statistics. But we have, as yet, no such perfect system, although, it is true, we are laying the foundation for one—especially by the State law, establishing a Bureau of Statistics—which has already furnished accurate tables of our crops, railroads, climatology, judicial administration, pauperism, and crimes. This department will eventually furnish us a most accurate picture of the State. It needs, however, some mode of ascertaining the manufacturing and mechanical industry of the State. For the coming year, 1860, this will, no doubt, be furnished by the statistics of the United States Government. After that, we hope, some means will be devised, by the State, of obtaining, at least, semi-decennial statistics of industry.

In the statistics of commercial towns, none are more interesting than those of Cincinnati. For this, there is found sufficient reason in the facts, that Cincinnati has had the most extraordinary growth of any town in the United States. As might be fairly inferred from its position and resources, its commerce and manufactures have been developed at a most extraordinary rate.

We have before us the “ANNUAL STATEMENT OF THE TRADE AND COMMERCE OF CINCINNATI,” for the commercial year ending August 31, 1859. We take it from the Cincinnati *Price Current*. It is the annual report made to the Cincinnati Chamber of Commerce, by its Secretary, William Smith; and is derived from the most reliable intelligence, furnished by those engaged in the different departments of business. This statement is—looked at in the light of growth and progress, an extraordinary document. But, all statistical tables need translation in order to be thoroughly comprehended and valued, by those not accustomed to look at figures as the representatives of things. Figures are, however, (in commercial and industrial tables,) the representatives of *things*, and of most important things, and to understand them, we should consider them as the *expression* of the production, consumption, and relation of the physical being of society. In the case before

us, we can not exhibit in one article the results of the whole movement, but will take first, the articles of commerce, used both for consumption and export. In consumption, these articles are used in Cincinnati and in the region of country in which it trades; and as exports, they are those upon which a commercial profit is made. We will take these articles up by classes:

I.—OF BREADSTUFFS.

Breadstuffs comprehend Flour, Corn, and Wheat; though the larger part of corn is used for whisky, rather than bread. Yet, it is proper to exhibit them together. Of *Flour*, the return is:

The following table shows the Imports and Exports of Flour at this place for fourteen years, ending August 31st, each year:

	Imports. brls.	Exports. brls.
1846.....	202,319	194,760
1847.....	512,516	581,920
1848.....	151,518	201,011
1849.....	447,844	267,420
1850.....	231,839	98,908
1851.....	482,772	96,131
1852.....	511,042	408,211
1853.....	449,069	312,811
1854.....	427,464	332,778
1855.....	342,772	199,276
1856.....	546,717	519,610
1857.....	463,096	416,789
1858.....	639,318	619,215
1859.....	558,173	633,318

It will be observed here that the exports of 1859 were greater than the imports. To account for this, we must turn to the imports and exports of Wheat. The imports of Wheat into Cincinnati have increased very rapidly, which arises from this fact, a railroad now penetrates Kentucky 111 miles, which enables the farmers of that State to bring their Wheat to market, and thus encourage its growth.

The following table shows the imports of Wheat, at this place, the last fourteen years, ending August 31st, each year:

	Bushels.
1846.....	431,486
1847.....	590,849
1848.....	570,813
1849.....	385,388
1850.....	522,659
1851.....	388,609
1852.....	377,037
1853.....	343,649
1854.....	408,084
1855.....	437,412
1856.....	1,069,468
1857.....	737,723
1858.....	1,211,543
1859.....	1,274,685

The following are the exports of Wheat from this port, the last three years, the exports not having been kept further back:

	Bushels.
1857.....	394,920
1858.....	631,660
1859.....	609,848

The consumption of Wheat Flour in Cincinnati may be very nearly ascertained by taking the imports and exports of Cincinnati for the last three years, and getting the average. Reducing the Wheat to Flour at the rate of five bushels to a barrel, and we have the result.

	Imports. brls.	Exports. brls.
1857.....	632,633	391,773
1858.....	875,622	731,547
1859.....	813,110	755,387
Average for one year.....	773,788	659,569
Average consumption per year.....		114,219

The consumption of Flour in Cincinnati is not more than half what it would be if there were few or no vegetables. The consumption is not much more than *one-third* of a pound

to each living soul, small and great; while in the army, where scarcely any vegetables are got, a *pound of Flour* is given for a *ration*. That, however, is for able bodied men.

OF CORN, the import was:

The following table shows the Imports and Exports of Corn, at this place, for the last fourteen years, ending August 31st, each year:

	Imports. bush.	Exports. bags.
1846.....	57,245	31,610
1847.....	896,238	258,198
1848.....	361,315	53,021
1849.....	344,810	7,176
1850.....	649,227	57,248
1851.....	469,195	20,137
1852.....	653,798	51,331
1853.....	723,331	59,132
1854.....	745,755	39,427
1855.....	845,579	64,344
1856.....	978,511	75,260
1857.....	1,673,363	81,470
1858.....	1,090,236	19,132
1859.....	1,139,022	28,503

The *bag* is, we believe, about 2½ bushels, so that the *import* last year was over 2,500,000 bushels, of which 1,800,000 bushels remained in the city. But a small part of this, however, was used as food. Most of it, nearly all, was made into whisky.

In connection with breadstuffs, however, we ought to include *Potatoes*. As an article of commerce this has now a very important place; but we can not tell the amount consumed, because those brought into the vegetable market, *by wagons*, are not included in this commercial table. The following is the import, by bushels, since 1850:

	Imports.	Exports.
1851.....	19,649	19,823
1852.....	20,739	23,844
1853.....	15,585	30,075
1854.....	35,244	7,295
1855.....	29,082	10,399
1856.....	33,508	26,305
1857.....	46,537	25,986
1858.....	44,686	82,381
1859.....	165,300	44,097

This shows an increase of *eight fold* since 1850! This is caused by want of those plain laws of commerce which are constantly acting to produce equality in the commercial world. Cincinnati did not import Potatoes largely, and by the rapid growth of the city, that article came to be comparatively scarce, and the price high. When it became very high, then a large importation commenced. Let us now compare the importation of *breadstuffs* for *five years*, taking a barrel of Flour at 200 lbs., and the other articles at 60 lbs. per bushel, and reducing the whole to bushels:

	Imported. lbs.
1854.....	137,067,900
1859.....	367,932,000

This table, which we have calculated exactly, proves that in five years only, the grain trade of Cincinnati has increased 270 per cent. This fact shows what we asserted to be true, that the history of commerce in Cincinnati presents most extraordinary growth. In these five years, the commerce of Chicago and St. Louis, of which so much has been said, increased in nothing like this ratio. The deduction may be fairly drawn, that the *resources* of Cincinnati, the springs which supply its business element, are both more stable, and much more abundant, than those of any city

in the country. But if there were any doubt of this proposition, there will be none when we come to examine other branches of commerce and industry.

We shall next refer to the imports of Grains.

II.—COFFEE.

	Imports. bags.	Exports. bags.
1850.....	67,170	22,030
1851.....	91,177	35,158
1852.....	95,732	43,654
1853.....	169,138	67,132
1854.....	91,425	48,634
1855.....	114,113	42,933
1856.....	92,066	37,903
1857.....	112,405	49,694
1858.....	129,129	68,744
1859.....	193,452	66,617

The increase is more than double, in ten years past; and the amount of Coffee brought into Cincinnati is *one-eighth* of the import of Rio Coffee into this country. This is equivalent to a supply of one-eighth part of the people of the United States; but we think that one cause of this large proportion is, the *greater proportional consumption of Coffee in the West*, or, rather, the Valley of the Ohio. We can not stop now to notice comparisons, but we are under the impression that a larger proportion of Coffee is consumed in the Valley of the Ohio, than in any part of the world.

III.—OF SUGAR AND MOLASSES.

The importation of these articles into Cincinnati has increased with great rapidity. The Sugar imported in ten years, was:

	Imports hhds.	Exports. hhds.
1850.....	26,760	13,005
1851.....	29,508	18,584
1852.....	39,224	15,237
1853.....	49,229	24,004
1854.....	64,461	25,441
1855.....	46,903	19,465
1856.....	32,354	16,446
1857.....	15,980	21,647
1858.....	44,976	46,247
1859.....	58,885	28,359

This is about one-sixth the average production of Sugar in Louisiana. In Sugar, as well as Coffee, the Miami country and the Ohio Valley, generally are large consumers.

Of Molasses, the import was:

	Imports. brls.	Exports. brls.
1850.....	54,063	25,878
1851.....	61,490	25,098
1852.....	93,132	48,866
1853.....	115,112	65,056
1854.....	86,430	63,381
1855.....	56,237	45,150
1856.....	55,174	37,324
1857.....	43,682	25,576
1858.....	72,369	43,233
1859.....	116,193	69,999

Sugar and Molasses having now become very cheap, the consumption is, of course, increased. Sugar is now *less* per pound than lard, and but *half* that of butter, and just about the same as good beef. Hence, there is no economy in refraining from the use of it; and Sugar has ceased to be a luxury.

We must bring this article to a close, and reserve our analysis of other branches of trade for another time. We shall continue the examination of this subject till we have established fully the commercial development of Cincinnati, during the last ten years.

ILLINOIS STATE FAIR.

TRIP—STEAM PLOWS, ETC.

When I left, I promised to give you a sketch of my trip to the Illinois State Fair, at Freeport, and more especially a description of the Steam plow. We took the usual route of the Hamilton and Dayton R. R. via Lima, and the Pittsburgh, Fort Wayne and Chicago. We were detained at Fort Wayne by the strike on the Michigan Southern Railroad, and while at dinner discovered a new idea, a genuine *Yankee trick*, it was nothing *short* of cutting *shorter* the chair legs used at the dining table, to prevent guests from being able to reach over and help themselves. Thus, by the aid of modesty and the *shortness* of chair legs, the landlord expected to get his *full* pay, while the disappointed traveler was constrained to leave with his appetite but partially gratified.

After dinner, while walking about the platform, I found a man engaged in putting up a shed of yellow poplar boards, seasoned, tongued and grooved; he was spreading white lead in the grooves in order to prevent them from leaking. I asked him to whom it belonged. Oh, said he, the gentleman that is having this done is not the owner of the house. No man that would saw the legs off the chairs, would order such waste as to spread white lead on poplar boards.

On Sunday morning, we found ourselves in Chicago, and after the usual "fixing up," after so long a trip, we sauntered about, and finally dropped in to hear the Rev. Dr. N. L. Rice, formerly of Cincinnati, and were highly edified with one of his best efforts. While in Chicago, I became acquainted with Mr. Arthur, the Superintendent of the Illinois Central R. R., who gave us considerable information in regard to railroad matters hereabouts, and especially relative to the Ill. Cent. R. R. This is the giant road of America—it is a leviathan in more ways than one. From the indications at this time, in five years from now, this road will have as much as it can possibly do to carry off the surplus products raised on the line of their own road. We were much gratified to find the road in a much better condition than we had expected.

After a good night's sleep, we started in the early morning train for Freeport, at which place we arrived about 2 o'clock. After tying up at a hotel, we went out to the Fair ground. Here we found a host of agricultural implements of all sorts, such as are usually seen at such places, and a fine display of stock of almost every description. But the attraction that brought us here is the great "Steam Plow." After wandering about awhile, we came in contact with the monster. It is a wholesale machine, and is evidently best adapted to breaking up prairie on a large scale.

The machine is composed of a square wrought iron frame, made of girder iron,

about 10 feet long and 8 feet wide; to this frame is attached a pair of pedestals near the after end, through whose boxes pass a shaft or axle, on which is a large drum, some 5 feet 10 inches long; and about the same diameter; nearly all the weight rests upon it, and to it all the propelling power is applied. The weight of the machine is some 13 tons. The steam cylinders are 9 inches diameter and 15 inches stroke, and are firmly secured to each side of said frame, and so geared to the axle as to revolve 6 times to one of the drum or driver, in order to increase the power, and, at the same time, reduce the speed, which is all important in drawing the plows, at a speed of five or six miles per hour is quite fast enough for plows to run. On the top of the frame is a water tank, capable of carrying some 10 barrels of water to supply the boiler. On the front of this frame a boiler is mounted, of a square form, at the bottom as high as the furnace; it then changes into a cylindrical form and raises some 4 feet. This boiler is composed of 228 tubes, $1\frac{1}{2}$ inches in diameter. It contains 375 square feet of fire surface, and is mounted with a locomotive smoke stack. In order to arrest the sparks, a "Doctor," or independent pumping engine is located just aft of the boiler, which is used to supply it with water, and also to draw water from a pond or cistern, by means of a suction tube some 30 or 40 feet long. This little "Doctor" also answers the purpose of a fire engine, in case any sparks should communicate to any thing combustible in reach.

The front part of the machine is provided with two large pieces of girder iron projecting forward in the form of a goose neck, coming down on the top of an axle some six feet long on each end of which is a wrought iron wheel some three feet in diameter and 15 inches on the face. To this axle is attached a segment of worm gear; in this revolves a worm, operated by means of a steering wheel; by this means the operator turns the machine in any direction desired. The engines are furnished with the link motion, similar to the locomotive, which renders the machine very convenient to handle. It is far more easily handled than one would suppose at first sight. The arrangement of the plows are as follows: They are 8 in number, arranged obliquely across the after part of, or behind the engine, secured to a frame, in order to keep them in their places. The engine is furnished with two large pieces of timber, projecting some 10 feet aft of the frame of the engine; on these timbers are four pulleys, over which the chains pass that suspend the plows so as not to touch the ground. These chains are wound up on a shaft for the purpose, operated by the engineer. To each of these plows a chain is so arranged as to reach a hook on the after part of the engine; these hooks are secured by a wooden pin in order to guard against breaking in case of any one of the plows meeting with any obstruction other than soil. It was

by one of these pins letting go that caused the report of breaking down that appeared on the last day of the fair. This machine is capable of plowing a cut 10 feet wide at one cut, and 6 inches deep, if desired. It traveled 6 miles per hour, came out of the furrow, turned around and entered the ground, in 75 seconds of time. The longer the field the better, the less time is occupied in turning around. If this machine could be kept cutting all the time, it would cut some 40 acres per day, but to make a due allowance for all stoppages, taking water, wood, and such like, it would be fair to conclude that twenty-five acres could be cut in a day.

EXPENSES.

25 acres at \$2.50 per acre.....	\$62 50
Cost of men.....	7 00
" fuel.....	6 00
" oil.....	50
Contingencies, getting water, wood.....	5 00
Interest of \$4,000.....	1 12
Balance.....	\$19 62
	\$42 88

The cost of this machine is \$4,000. A paying business might be made by any one at these figures. It can also draw a very heavy load, either of loaded wagons or haul logs if desired. It is capable of being jacked up in 30 minutes, and by running the belt off the drum will drive any sort of machinery. It is capable of driving two circular saw mills. If desired, you may go into the woods and saw lumber, and then haul it to market. A great amount of objections have been raised to this machine, by those who do not understand the matter properly. If you wish a horse to work on ice, you must rough his shoes. If Mr. Fawkes wishes to plow when it is wet or slippery, he roughs his driving drum, just as any sensible old farmer would do his horse in the winter months.

I feel confident that Mr. Fawkes has laid a foundation for a useful implement for the prairie region, on an extensive scale. As to the utility of the steam plow for a small farm, it remains to be seen, and, no doubt, will be seen at no very distant day. The present foundation is a basis for others, and probably Mr. F. himself, to make further improvements on. The trial is now deferred until Mr. F. returns from his engagements, when the committee will again witness some further trials at some other point on the I. C. R. R., of which due notice will be given.

Mr. Fawkes is gaining ground very fast, and if the State Board decline giving him the premium, the public will not withhold their good opinion of his successful machine.

MECHANIC.

The earnings of the Cleveland and Mahoning railroad for August were:

Passengers.....	\$4,340 78
Freight.....	11,073 91
Coal.....	9,553 99
Mail.....	262 50

Total earnings for August.....	\$25,231 27
Operating expenses.....	8,894 92

Net earnings.....\$16,336 35
In the expenses are included about \$1,400 for extraordinary repairs to a bridge.

TRIP EAST—B. & O. RAILROAD.

BARNUM'S HOTEL,
BALTIMORE, Sep. 18, 1859.

EDITORS RECORD:—My trip here had all the variety of scene and incident that belongs to this route "with a slight variation." From Cincinnati to Columbus, I leave description to "Victor."

Who laid his length the car along,
His coat tail folded down—Napping.

And who, of course, will print his dreams in the "Commercial," which some of your readers will see.

From thence on, neither incident nor accident worth note occurred until we neared the river, when we run into a rain and a crowd of people, who were attending a county horse race. We took a part of the crowd and the rain along—dropping the people at the next station, but bringing the rain clear through—twenty-four hours of *pour*, none of your dripping, drizzling, showery kind, but a *wet day* of the old Noah kind.

At Wheeling, I took a sleeping car, just to try it. The "chambermaid," dressed in male attire, was very accommodating and pleasant, and gave me an under berth, where I took twenty-five sleeps, being very tired. Between the sleeps I noticed that it rained. A sleeping car is a great convenience—you can lay at length—the tired spinal column, instead of being bumped together, is shook delightfully loose, and the two-fifths of the body that is fluid, has its throbbing waves contra-splashed like a pickle bottle on its side, essentially changing the current of one's feelings. Then you have the quiet of a public sleeping room, no one feeling privileged to talk across the aisle to his neighbor, more than an hour at a time—no one feeling privileged to make more than twice as much noise as they would in another car. The odor of forty pairs of boots laid along the floor—the perfume of the coal and lubricating oils, and the aroma of tobacco squirted over the passage between berths, intermingled with forty breaths, is all ventilated at each station, by opening the doors and letting the way passengers walk through. I commend the sleeping car as a variety to spice travel.

But the *rain*.—It came through the sleeping car, leaking through the berths, or shelves, as an old passenger called them; it beat on the roof, and rattled on the windows all night, and increased in the morning, with wind enough to blow down the corn flat to the ground in many fields, until, when nearing Harper's Ferry, it flowed over the track for some four miles, crossing it from one side to the other, sometimes flowing along the track a foot or two deep, piling fence-rails, posts, logs, boards, &c., in drift piles on the track, and in one case, washing the ballasting out, and sheering the track several feet to one side, yet, by the system of tying the rail joints with a stringer of wood, as it is on this road, the track held together, and we went safely over.

It somewhat varied and mitigated the anxiety and uncertainty of the hour we were getting through the deluge, by seeing the Supervisor of the road, Alex. Diffey, and the conductor, S. C. Gaither, leg deep in the flood, ahead of the engine, feeling for the track, like an Illinois river pilot hunting out the channel. The engineer worked his machine with great care and nicety, which it required, there, as the drift-wood was constantly running under the wheels of the whole train, the brakemen being overboard pulling the floating brakes from under the wheels, as the train crawled along.

There were places where the water was flowing like a river a hundred yards wide, where there had not been a drop of flowing water for months before.

The arrangement for feeding over the route is reprehensible, decidedly—start from Cincinnati at 8.30, and dine at Zanesville at 3.30—sup at Belair at 7—breakfast at Cumberland at 6.30, and dine at Baltimore at 4 o'clock.—Better time should be given, and better tables set for the money.

Barnum's is fuller than before in years, so he says. Yours, TRIPPING.

MEMPHIS & CHARLESTON R. R. CO.

OFFICE MEMPHIS AND CHARLESTON R. R. CO.,
Memphis, July 1, 1859.

The Board of Directors herewith submit their Ninth Annual Report to the Stockholders in the Memphis and Charleston Railroad Company, in obedience to your Charter and By-Laws.

At the date of your last Annual Meeting, you were informed that Col. F. C. Arms, the general superintendent and chief engineer of your road, had resigned his position. Since his resignation the road has been operated without any general superintendent; the division superintendents having full charge of their respective divisions—W. J. Ross, Esq., having charge of the eastern division, from Stevenson to Burns, including the Florence Branch, and Col. B. Ayers having charge of the western division, from Burns to Memphis, including the Somerville Branch.

Owing to the large amount of new work on hand, including the construction of the Florence Branch, the Board of Directors found it necessary to employ an experienced engineer to take charge of the road way as well as all new work under construction; to this responsible position, Mr. M. B. Pritchard, formerly of the East Tennessee and Georgia Railroad, was elected, and entered upon the duties of his office in March last. To the reports of these gentlemen the Board would respectfully refer you, for the details of the operations of the road in their several departments. From these reports, together with the general balance sheet from the Treasurer's books, it will be seen that the receipts and expenditures in the operative department have been as follows:

Receipts from Passengers.....	\$751,923 01
" Freight.....	509,991 66
" Mails.....	55,175 00
" Express.....	10,974 40
" Rents and privileges.....	2,748 33
	\$1,330,812 40
Less Road Expenses—E. Division.....	245,193 53
" W. Division.....	307,528 27
	552,721 80
Net Receipts of Road for fiscal year ending June 30, 1859.....	\$778,036 00

This sum is equal to over 12½ per cent. upon the entire cost of the road and equipment, and every thing incident thereto, as shown in another portion of this Report, amounting to \$6,188,033 49. The operating expenses for the year, of \$552,776 40 is a fraction under 42 per cent. of the gross receipts.

This is much below the average per cent. of expenses of operating railroads in the United States, and it might be inferred that this low per cent. of expenses had been attained at the expense of the road bed and machinery, but this inference would be wholly at variance with the facts, as no pains or expense has been spared to keep both road bed and machinery in perfect order, and the board flatter themselves that an examination of each will satisfy every stockholder that they will compare favorably with the best managed railroads in the United States.

It will be recollected that the estimate of the board in their Seventh Annual Report, for the year just closed, was, for gross receipts, \$1,200,000; expenses, \$540,000, net earnings, \$660,000; thus it will be seen that the gross receipts have exceeded their estimate \$130,812 40, and the net earnings \$118,036 00. This has been caused, in a great measure, by a very large Cotton crop, and an extraordinary prosperity in our commercial and monetary affairs generally.

From the net earnings of the Road for the past year, of.....\$778,036 00

Must be deducted the following items:

Interest paid on Company bonds.....	\$107,704 35
Interest on State Tennessee bonds.....	66,000 00
Interest and Exchange on Floating Debt.....	22,133 75
	195,838 10

Leaving net profits of.....\$582,197 90

After paying interest and exchange on funded and floating debt, or 26 per cent. on the original capital paid in by the stockholders, of \$2,237,665 00, as shown by the Treasurer's balance sheet.

This makes the net earnings of the road from the commencement of operations to 30th June, 1859, after charging off all interest and exchange on borrowed capital, as follows:

Profit and Loss, 30th June, 1858.....	\$664,645 40
Net Profits, 30th June, 1858, to 30th June, 1859.....	778,036 00
Forfeited Stock to 30th June, 1859.....	17,768 06
	\$1,460,449 46

Less interest on Company bonds for the past year.....	107,704 35
Less interest on State Tennessee bonds, for past year.....	66,000 00
Less interest on Floating Debt, for past year.....	22,133 75
	195,838 10

Netting.....\$1,264,611 36

Which will stand to the credit of profit and loss, equal to 56½ per cent. on original capital stock paid in by the Stockholders, after 30th June, 1859. This sum has been used in constructing and equipping the road, and is really a part of your capital, and the original stockholders are entitled to a stock dividend to that extent, when the floating debt is paid.

FINANCIAL CONDITION.

The financial condition of the Company is shown from the Treasurer's condensed balance sheet, giving the entire liabilities and assets of the Company on the 30th of June, 1859, to which you are referred for information in detail in that department. From this statement it is shown that the receipts and disbursements of the Treasurer's department from commencement of operations to the 30th of June, 1859, have been as follows:

Receipts from Capital Stock.....	\$2,237,665 00
" Forfeited Stock.....	17,768 06
" State of Tennessee.....	1,100,000 00
" Company Bonds.....	1,600,000 00
" Bills Payable.....	345,730 64
" Individuals.....	77,881 47
" Connecting Roads.....	20,003 90
" Profit and loss to June 30, '58.....	664,645 40
" Suspended Tickets.....	475 79
" Net Receipts for past fiscal year.....	778,036 00
	\$6,842,206 26

DISBURSEMENTS.

Paid for Road Construction proper.....	5,126,954 23
" Equipment.....	743,729 40
" Incidental to construction.....	317,349 86
" Interest on funded and Floating debt for the past year.....	195,838 10
" Stock in Mississippi Central R. R. Material for Road and other property.....	248,828 88
" Cash and available assets on hand.....	209,505 79
	\$6,842,206 26

Receipts and disbursements of the Treasury for the fiscal year ending June 30, 1859:

RECEIPTS.

Cash on hand 30th June, 1858.....	\$9,060 86
Received from proceeds Co. bonds sold.....	98,000 00
" Connecting roads.....	7,920 40
" Suspended Ticket Account.....	475 79
Net receipts of road for the past year.....	778,036 00
Credit State of Tennessee and charged Sinking Fund.....	8,000 00
Loss of Negro on Eastern Division, charged to Railroad Ex.....	1,000 00
Decrease of Iron, charged to Florence Branch.....	21,173 23
Less Duty paid to U. S. on Iron.....	9,608 28
	11,564 95
Rent of Railroad Hotel, previous to June 30, 1858.....	387 75
Through Ticket Agency paid.....	566 57
	\$915,012 32

DISBURSEMENTS.

Construction as per tabular statement.....	\$174,955 85
Paid on Bills payable.....	319,946 79
" Individual dues.....	80,132 33
" Increase of Bills receivable.....	12,901 88
Due from Post Office Department.....	27,597 50
Increase of Agents Dues.....	8,087 30
Materials for Road.....	7,293 88
Sinking Fund.....	16,463 75
Telegraph.....	2,609 92
Florence Branch.....	32,674 96
Tennessee and Alabama Central R. R.....	19,384 54
Interest on Funded and Floating Debt.....	195,838 10
Decrease of Capital and Forfeited Stock.....	2,682 04
Cash on hand June 30, 1859.....	14,443 48
	\$915,012 32

Liabilities of the Company are as follows:

FUNDED DEBT.

Due to the State of Tennessee maturing, January 1, 1892.....	\$1,100,000 00
Company bonds due in 1880.....	1,600,000 00
	2,700,000 00
Less Sinking Fund paid to State of Tennessee.....	16,463 75
	\$2,683,536 25

FLOATING DEBT.

Bills Payable.....	\$345,730 64
Due to Individuals.....	77,881 47
Due to Connecting Roads.....	20,003 90
	443,616 01
Less cash and cash assets on hand.....	\$209,505 79
Less discount on \$41,000 city bonds 20 per cent.....	8,200 00
	201,305 79
Balance due on Floating Debt over assets.....	\$242,310 22

Estimated prospective liability for the coming year:

Interest on Funded and Floating Debt.....	\$195,000 00
Seven new locomotives under contract.....	63,000 00
Four passenger cars received but not paid for.....	9,600 00
Fifty box freight cars.....	33,750 00
Six second class baggage cars.....	4,500 00
Engineers estimate for permanent new work, Masonry, Bridges, etc., to take place of, and fill up trestlework, new buildings, etc.....	70,000 00
Sinking Fund to State of Tennessee.....	15,000 00
	\$389,850 00
Add to this sum Floating Debt, after deducting available assets.....	242,310 22
Total.....	\$632,160 22

The above estimate shows that the sum of \$632,160 22 will have to be provided to meet

the present Floating Debt, and the prospective wants of the Company for the coming fiscal year. To meet this liability we have to rely upon the receipts of the Road after paying expenses. The Board, however, feel assured that you may rely upon the net receipts of the coming year being equal at least to those of the past year; say \$778,036 00. Deducting the foregoing liabilities and wants of the Company from this sum would leave you \$145,875 78, surplus on the 30th June, 1860. Should the policy of declaring a stock dividend for the surplus earnings of the Road be adopted, your present Capital Stock would be increased by such dividend, (say of 60 per cent.) \$1,342,599 00, and swell your capital stock to \$3,580,264 00. The surplus earnings above shown, after paying Floating debt and increased new work and equipment is amply sufficient to pay a semi annual cash dividend of 4 per cent. on 30th June, 1860, upon original as well as increased stock. The Board do not anticipate that there will be any necessity to make negotiations to meet the foregoing liabilities, as it is believed that the receipts of the road will be ample to pay all expenses, and meet the liabilities as they mature.

By reference to tabular statement comparing the business of the past with the previous year, it will be found that the aggregate increase of the past year is \$366,401 75, or 38 per cent.

The increase in the passenger department is \$159,419 51, or 27 per cent. In Freight Department, \$172,795 97, or 51 per cent. Mail, Express, and other sources, \$34,185 77, or 98 per cent. The increase in the number of bales of Cotton transported over the entire road is 72,204 bales, or 59 per cent.

This increase has exceeded the most sanguine expectations, and they can not encourage the stockholders to hope that this increase will continue for the coming year. But they see no reason why the past year's receipts, with an average crop, may not be fully maintained or slightly exceeded. But they can not hope that the low average of expenses can be maintained, owing to the large number of cross ties and other wood structures that will have to be renewed within the coming year. Although they expect some increase in the gross receipts, they can not encourage the hope that the net receipts will exceed those of the past year.

The year just closed has been one of unusual prosperity with all Southern Railroads, and, in fact, in almost every department of business, and but for the fact that your Road is new, and its resources as yet undeveloped, it would be barely safe to calculate or rely upon the average receipts in future equaling the past year. But the Board think it not unsafe to calculate that the natural increase in future will fully make up any deficit in crops, or changes in the monetary and commercial affairs of the country.

Assuming that the calculations here made are reliable, and that your stock will be increased as proposed, and your floating debt extinguished at the end of the present fiscal year, and your present net receipts maintained, making no calculation for increase in the future, your position would be this:

Net Receipts.....	\$778,036 00
From which deduct—	
Interest on Funded Debt of \$2,-	
700,000.....	\$178,000 00
Sinking Fund on same, 2 per cent.	54,000 00
Cash dividend 8 per cent. on original and increased Stock of	
\$3,580,264 00.....	286,421 00
	518,421 00

Leaving a surplus annually of.....\$259,615 00

After paying interest and sinking fund on all funded debt, and an eight per cent cash dividend to stockholders on their stock, after a stock dividend of 60 per cent. has been declared, the Board are of opinion that this large surplus will be amply sufficient to cover all extraordinary casualties, to purchase any new machinery which may be necessary, renewal of iron and other materials subject to deterioration. They are of opinion that there is no economy in permitting the road bed or rolling stock to get out of order, or go into delapidation or decay. Hence an ample surplus should be provided annually to meet any contingencies that may arise.

The policy adopted has been to keep the road bed up to its original value, and in perfect and safe order, without regard to cost, and to keep every engine and car purchased in good running order, as long as safe to be used, and then to be thoroughly rebuilt or new ones purchased, and charged to road expenses, keeping the equipment fully up to original purchase in amount and value.

The business of the past year has been done over your road in some respects under very unfavorable circumstances; the heavy increase of business with an insufficiency of motive power and cars to meet this unexpected demand, made it necessary that a large portion of the repairs should be done at night, at an extra heavy expense, so that every locomotive and car might be kept in active service during the day, if possible. In order to avoid this difficulty hereafter, and to enable the Company to meet any demand made upon it for transportation, the Board of Directors have ordered and contracts are made for eleven new locomotives and fifty box freight cars; four of the locomotives have arrived and are now in use, together with one that was reported under contract at your last meeting. The remainder, together with the cars, will be delivered in the month of September, in time for the fall business.

Since your last annual meeting ten new first class passenger cars, five second class, and six second class baggage cars have been purchased, and four first class baggage cars have been built in the Company's shops, which have, and will be charged to equipment, thereby increasing the equipment to that extent. This increase became necessary in order to enable the Company, to put on double daily passenger trains over the entire road, which was done on the 1st day of July, 1859. Whether this increase of the passenger service will increase your net revenue can only be determined by experience. Should it prove unprofitable, after a fair trial, it will be discontinued.

The aggregate cost of road and equipment on the 1st of July, 1858, the amount expended during the year and the present total cost, is about as follows:

Construction account up to July, 1858.....	\$6,013,077 64
From July, 1858 to July, 1859.....	174,955 85
Total cost of Road.....	\$6,188,033 49

It may not be uninteresting to the Stockholders to know the sources from whence their revenue is derived, that they may estimate the chances of retaining or increasing it. The past year's business has been derived from the following sources:

Through Travel East to New York, Baltimore, and Philadelphia.....	\$21,484 54
Through Travel West from same points.....	14,367 55
	\$35,852 09
Through Travel East to other points.....	147,338 10
Through Travel West from other points.....	164,900 00
Local Travel East.....	204,700 82
Local Travel West.....	199,132 00
	\$751,923 01

Through Freight East.....	44,019 19
Through Freight West.....	57,714 28
Local Freight East.....	202,183 61
Local Freight West.....	206,074 58
Mails and other sources.....	68,897 73
	\$1,330,812 40

Thus it will be seen that your revenue from local business alone, which can never be interfered with, but must be greatly increased by the development of the country through which your road passes, has been:

From Local Freight.....	\$408,958 19
From Local Passengers.....	403,832 52
From Mail and other sources.....	68,897 73
	\$880,988 74

The total through business has been:

From Passengers.....	\$348,090 19
From Freight.....	101,733 47
	\$449,823 66

The through freight business is but in its infancy, and certainly we can never have stronger competition for it than we had by the Western lines last season, as they carried it for much less than we did, and far below what it actually cost them to perform the service. Consequently, with our present greatly improved facilities in point of speed and reduced rates between Charleston and Savannah, and the line of your road, together with the prospect of having arrangements perfected over the Virginia line at an early day for through freight connections by all rail to all the Northern Atlantic and intermediate cities, it is confidently expected that this branch of your service must be greatly increased.

ILLINOIS SOUTHERN R. R.

FROM VINCENNES TO CARMÍ.

The undersigned, Committee appointed by the Board of Directors of the Illinois Southern Railroad Company, of Indiana, to examine the ground over which said road is to pass, and also to examine the line of said road from St. Francisville to Carmí, in Illinois, having discharged the duty required of us, beg leave to submit the following

REPORT:

We left Vincennes on Tuesday, the 2d inst., and traveled down the river, or levee road, to the farm of Mr. Eastham, being the last farm in Cathlinette prairie, a distance of about three miles from the city. The river route we found to be entirely practicable for the construction of the road. The line from the foot of Water street to the farm of Mr. Sam'l Payne, a distance of about 1½ miles, is very nearly straight, and the levee along said line may be used entire as a part of the road-bed, thereby materially lessening the cost of construction. From Mr. Payne's, a very gentle curve brings us to the lower edge of the prairie. Thus far the grade will average about 3 feet.

From the prairie, for a distance of about 4 miles, on nearly a straight line, the ground is high, firm bottom, overflowing but little, requiring a grade of about 4½ feet. The line then strikes, just below Mr. Richardville's, what is called Tacker's Ridge, which is very favorable ground. From this point to the river, running along and around the big St. Francisville bend, the distance is about two miles. Following this line, requiring a grade of 4½ feet, we reach the "sand-hill," from which, to the river, at a point about three hundred yards below St. Francisville, the ground being low and subject to very heavy overflow for a distance of probably five hundred yards, a grade of about nine feet will be needed. This brings us to what is, in our opinion, the best crossing of the Wa-

bash for our road. The river may be crossed at right angles on a smooth rock bottom from shore to shore. Sand stone of good quality, suitable for piers and abutments, and timber of the best kind for bridge purposes, may be obtained at this point in abundance. On the Indiana shore, we learned, there is very little current, and no danger of the embankment being disturbed by that cause, while on the Illinois shore the land is high and not subject to overflow after passing one hundred feet from the river.

We also examined the ground with the view of finding a suitable crossing at

NINE MILE RIPPLE.

The ground on the Indiana side is uneven and low, and is subject to heavy inundations when the river is high. The lands back appear to be even lower than those on the river, and are considerably cut up with sloughs.—During "floods" a strong current sets out from the river, and we doubt very much if an embankment could be made strong and heavy enough to resist it. The lands in the vicinity are deficient in timber, and good stone for bridge purposes could not be obtained at this point. On the Illinois side, opposite, say about 1½ miles above St. Francisville, we found the lands very low, and subject to heavy overflow. A strong current sweeps over them from Embarrass river, which puts into the Wabash some three miles above. The heaviest earth-work which could be raised here, would, probably, not be able to withstand the force of the water during a single freshet. We, therefore, concluded that a good, or even tolerable, crossing can not be had at the Ripple.

OBJECTIONS TO THE ST. FRANCISVILLE CROSSING.

It is urged by some, that if the road crosses at St. Francisville, the length of the line, and, consequently, the cost of construction will be materially increased. This is, undoubtedly, true, and yet we think it would be to the advantage and interest of all concerned to incur the increased expense. A good crossing can not be had elsewhere. As we have before stated, the foundation is solid and smooth.—There is an abundance of good rock and timber close at hand; the ground is, in every respect, favorable on both shores; and there is no danger of the washing away of the embankments. None of these advantages can be had at the Ripple, or at any other point, so far as our observation goes, between the Ripple and St. Francisville. We may mention here another fact: While the length of the line on the Indiana side will be increased about two miles by crossing at St. Francisville instead of at the Ripple, the road on the Illinois will be shortened very nearly as much, increasing the distance from Vincennes to St. Francisville, in reality, but little.

As a matter of economy, therefore, we would recommend the adoption of the St. Francisville crossing.

The foregoing presents the substance of our observations, so far as the Indiana branch of the road is concerned.

THE RAILROAD IN ILLINOIS.

Leaving St. Francisville, we continued our examination southward to ascertain the condition of the road in Illinois. About two miles below the small village of Timberville we came to the work under contract by Messrs. Stanton. They have a considerable force in the field and are prosecuting the work vigorously. From this point to Mt. Carmel, say six miles, a good deal of grading has been done, a part

of it, at Crawfish Creek, and at Mt. Carmel, heavy work. Below Mt. Carmel, there is yet some embankment to be made, but the largest portion of it is done for 3½ or four miles. This brought us to Sugar creek, but the line being fenced for a distance of about four miles and no work of any consequence done, we passed around, and again struck the line at a point called Sand Hills, where about one mile of grade is made. Thence about three miles to the line of Edwards county, there is very little work done. Here, at the county line, we reached the work under contract by Mr. Sam'l Freeman, who has about seven miles of road to make from this point to Grayville. About 3½ miles, the heaviest portion of his work, is completed, Mr. F. informs us that his force now engaged consists of 70 men, and that he will be able to finish his contract by the first of November next. From his statements, corroborated by other intelligent and reliable parties, we think that, by the time named, there will be about 12 miles of road-bed completed between Grayville and Mt. Carmel, not taking into account the work which Messrs. Stanton, or their sub-contractors, may do between said points.

Between Grayville and Carmi, from the best observation we could make, we feel warranted in saying that about eight miles of road-bed has been completed. This portion of the work was let mostly to small contractors, many of whom have abandoned their work, and at present there is but little doing on this part of the line.

The general topography of the line from St. Francisville to Carmi may be briefly described as almost level, with gentle undulations of surface, sufficient for drainage. It is not subject to overflow, and the work, as a general thing, is light.

AGRICULTURAL RESOURCES.

We were agreeably surprised in respect to the agricultural resources of Wabash and White counties. They are far more extensive and important than we had supposed. In fertility and productiveness the lands are not surpassed by any in the West. Of timber there is an inexhaustible supply of best kinds. The Grand Rapids at Mt. Carmel, and the Falls of the Little Wabash at Carmi, furnish unending and unlimited water power, sufficient for the most extensive manufacturing establishments, and it can not be many years before this power will be put to profitable use. In these two counties alone, we are advised by well informed parties, that the wheat crop, of itself, will reach 700,000 bushels. The corn crop will be enormous, and other crops in proportion.—Last year, at the Agricultural Fair, held in Wabash, a field of nine acres of wheat was entered for a premium. It produced 364 bushels or 40½ bushels to the acre. The premium crop of oats was 241½ bushels from three acres, or over 80 bushels per acre; and barley 37 bushels per acre. The corn crop will rank with that raised upon our best Wabash and White river bottom lands. In White county, last year, one field of corn turned off 107 bushels per acre. The farms and improvements are numerous, and have a look of thrift about them which always characterizes the farms of a growing and prosperous country. The people appear to be thorough-going, industrious, and energetic. Indeed, in every particular, the above named counties are not excelled by any territory of equal size in Southern Indiana or Illinois.

WHAT IS NEEDED.

But there is one great drawback. Like our own country, before our railroads were com-

pleted, they have no outlet for their surplus products—no thoroughfare—except the Wabash river. *They need a railroad, and they must have one.* It would open up and develop their vast resources, and enable them to progress and add to the general wealth of the country, just as we have done, aided by our railroads. The proposed road, if completed from Carmi to this point, would give Vincennes the control of trade, which, in value and extent, would be greater to us than any we have, or can reasonably expect to have, from any other quarter. No intelligent man will doubt this, if he will go over the ground as we have done. And yet, we hear fears expressed that the road can not be made. We have no such fears. True, the amount of work already done is less than we heretofore supposed, but the financial matters of the company are in better condition and, their means more abundant than our citizens have been willing to believe; and it is the opinion of your committee, that there is no cause to doubt the ability of the Illinois Company to build their road from Carmi to St. Francisville, a distance of 50 miles. When the stringency of the times, for the past two years, and the general depression which has attended all works of a public character, are taken into consideration, the slow progress heretofore made may be in some measure accounted for. The interest manifested by the people at Mt. Carmel, at Grayville, and at Carmi, and, in fact, all along the line, for the immediate construction of the road is very earnest and warm. These people are determined to have an outlet by railroad; they are strongly in favor of connecting at this point, with the other roads which run through Vincennes. They have, and can raise ample means to do all they have proposed to do; but they demand on the part of our city and citizens some evidence that we will do our part and join iron-bands with them at St. Francisville. If they can not secure our coöperation, they *will* secure coöperation, and make the connection with the Ohio and Mississippi Railroad elsewhere. It appears to your committee then, that the duty of our city and citizens is plain. We should *go to work* at once; stop fretting and doubting and caviling; obtain subscriptions for the amount necessary to build our end of the road, and make our arrangements to build it and get it ready for use as our Illinois friends are doing theirs. This would encourage and stimulate them, and give increased life and vitality to the whole enterprise. Let us go to work.

I. S. WILKINS,
L. L. WATSON.

VINCENNES, Aug. 13, 1859.

BUSINESS ON THE NEW YORK CENTRAL.—The Buffalo Courier, referring to the increasing activity on the lakes, the canals and the railroads, says:

"The New York Central Railroad have now laying at their dock eight propellers, containing, on an aggregate, 26,000 barrels of flour, beside other merchandise. The Freight Depot is completely crammed with flour, whisky, pork, oil cake, seeds, &c., containing, with the propellers afloat, over 36,000 barrels of flour. It will require 150 cars daily, to free the depot from the large stock now constantly arriving.

"One hundred and thirty-five laborers are now employed in and about the depot unloading freight, who are paid 87½ cents per diem. One hundred and seventy-two cars left for the east Sunday and yesterday."

IRON MOUNTAIN RAILROAD.

Missouri it seems is determined to build a railroad connecting her Iron Mountain and her city of St. Louis with the South, thus completing the last link of that stupendous chain work of connection which unites her commercial capital with the four corners of the Union. The great river has become an insufficient channel for the Southern trade. Its increasing importance demands a railroad outlet to the lower Mississippi. The celebrated Iron Mountain, with its incalculable wealth of mineral treasure, already connected by railroad with St. Louis, is the nearest point, and affords the most accessible route to the lower Mississippi. The State has given liberal aid to the construction of a road to the most available point on that river, which, considered together with the wealth of the company, who own the Mountain, and the advancing enterprise of the age, in augmenting commercial facilities, makes the ultimate construction of the road certain, and gives us well grounded hopes of seeing it in operation at an early day.

In view of these facts, the question arises what point on the Mississippi shall be selected as the terminus of this road. The selection of this point must be determined by two considerations—the pecuniary assistance which any place seeking this advantage may be able to give the company, and the advantageous connection with other roads, which such place may be able to afford. It seems evident that either Memphis, Hickman, or Columbus, is destined to be the terminus of the Iron Mountain road. The two latter are about equidistant from the Mountain, and little more than one half its distance from Memphis. To carry the road to Memphis will almost double its cost and indefinitely defer the period of its completion. The aid granted by the State to the enterprise, it is evident, was not given with the view of carrying it to Memphis, and to make it feasible would have to be almost doubled. Missouri has already strained her credit in the construction of railroads, and can scarcely be expected to do more in this instance than she has done. It is equally extravagant to expect that the city of Memphis, wealthy and enterprising as she may be, can contribute the additional expense necessary to build the road to Hopewell, over what it would cost to bring it to Hickman or Columbus. Neither can she offer any advantageous connections which will not be equally obtained by having it terminate at one of the last mentioned towns. The Ohio and Mobile, and the Nashville and North-western Railroads, connect with every railroad running into Memphis on the left bank of the Mississippi—and more advantageously to Missouri for purposes of travel and commerce than such connection would be at Memphis. From Hickman, down, the father of waters fully answers all the demands of commerce, and no folly is more preposterous than to build a railroad almost parallel with its banks two hundred miles further than is necessary to reach them. Indeed it must be admitted that the interest of the Iron Mountain Railroad imperiously require them to bring their road to the Mississippi at the nearest possible point, pecuniarily considered. Thus, as we think correctly reasoning, we feel confident that the hopes of Memphis are vain as the shadow of a dream. One hundred thousand dollars from Hickman or Columbus will be a more substantial aid to the enterprise than a million paid by Memphis.

It remains to consider the respective claims

of Hickman and Columbus, and indicate, if possible, which of them is destined to secure this considerable advantage. The difference of expense in constructing the road at which ever it may terminate, is not worthy of consideration. Nor are we prepared to say that the route to one presents any advantages over the route to the other. We are willing to concede that in these respects the rival cities are about equal. But in many respects, likely to be very influential in settling this question, Hickman enjoys an immense superiority to Columbus. All that the latter is or can hope to be, she owes to the Ohio and Mobile Railroad. So far from any wealth or influence which she formerly possessed, having established there the terminus of that road, she was, from the beginning and is now, the mere creature of the road, owing to it what little trade she enjoys, and depends upon it for her very existence. Her boasted contribution was merely nominal, and had not a feather's weight of influence with the company. Their charters require the road to be completed to the mouth of the Ohio. We notice an act of the last session of Congress extending the time in which this shall be done to 1856, the second time, we believe, such an extension has been granted. The enormous land grants made by several States to this road and confirmed by Congress, depend for their validity upon its completion to the Ohio. The infatuation of our little neighbor in believing that she is the settled terminus of the Mobile Railroad, is amusing enough. Consequently, exactly in proportion to her insignificance, she begins to imagine this great road her own peculiar work, and utterly ignores the idea of her dependence on it; and how frail and unsubstantial that dependence is. In truth she is only a little depot of the company to exist during their pleasure, and to die when they give the word. And in five years at the least they must give the word or forfeit enough wealth to build fifty such towns as Columbus. If then it be a desirable object for the Iron Mountain Railroad Company to connect with the Ohio and Mobile Railroad, it will not certainly do so at a mere temporary station like Columbus. Nor will it be deemed judicious to make such connection at Cairo, as some years must elapse before the Mobile and Ohio Railroad can reach that point, though it is bound ultimately to go there. Neither by touching the river forty miles below Cairo does it add to the length of the road, while it increases its means by intersecting several wealthy counties.

A long time before Columbus had anything more than a name, Hickman was a thriving place, the chief shipping point of some twelve tributary counties in Tennessee and Kentucky. The country immediately around it is unsurpassed in fertility, and is settled by wealthy and substantial farmers. In this respect Hickman is superior to Memphis herself, much less Columbus. Until the construction of the railroads ending at Memphis, she was almost equal to it as a shipping point, and is now superior to any other on the river. The Nashville and North-western Railroad is now on a certain and secure basis, and will be in operation in three years at the furthest, from end to end. The Iron Mountain Railroad can scarcely be built by that time. At this point St. Louis can, almost, on a direct line, connect herself with Nashville and the South-east generally. We quote an article from the Nashville Banner, showing that the people of that city are awakening to the importance of the enterprise, and will, no doubt, contribute liberally to its success. Fifteen

miles from this place, the Nashville and North-western intersects the Mobile and Ohio Railroad, giving connection with the entire South, also intersecting a most important link in that stupendous chain of railroads destined to bind the widest portions of our Union together. It is all important to the citizens of Hickman and of Nashville that this great connection should be established. We hope active measures will be taken, and that our citizens will show a determination not to be outdone in liberality when so many favorable circumstances conduce to obtain for them this permanent and immense advantage. The Iron Mountain Railroad secured and in operation in connection with the Nashville and North-western, the future prosperity and greatness of Hickman are established and secured beyond a doubt. Its attainment of a commercial importance, second only to that of Memphis and New Orleans on the Mississippi, is as fixed as fate. With such opportunities in our grasp, shall we remain supine and indifferent, governed by foolish fears and false economy until they are snatched from us by more active and less favored rivals? The result will show. The time is soon coming when something must be done, and until then we shall neglect no opportunity to urge and stimulate our citizens to be up and awake and ready to seize upon the favors of fortune, when now after long neglect she seems inclined to smile upon us.—*Hickman Argus.*

ENGLISH RAILWAY NEWS.

REPORT ON RAILWAYS TO THE ENGLISH BOARD OF TRADE.—The report of Captain D. Galton, Royal engineers, in the proceedings of the Board of Trade, relating to railways for the year 1858, has been published as a blue book. It adduces the following facts:

In the session of 1858, 113 railway bills came before Parliament, and the length of new line proposed by these bills was 698. But only 73 of the bills were passed, and 328 miles of new line only authorized. In 1857, 82 acts were passed, authorizing 663 miles of new line; in 1856, 59; in 1855, 73. The amount of money authorized to be raised last year for new lines and new works, was £6,834,705, against £10,336,413 in 1857, £5,784,426 in 1856, £9,192,038 in 1855, £9,211,602 in 1854, £15,517,601 in 1853, £4,333,834 in 1852, £9,553,275 in 1851, £4,115,632 in 1850. The gross total sum authorized to be raised in the 13 years, from 1846 to 1858, (both inclusive,) amounted to £265,142,590. In 1846 alone, the period of the great railway mania, £132,617,368 was authorized to be raised for the construction of 4,538 miles of railway. The total amount of money authorized to be raised by railway companies by shares and on loan to the end of 1858, was £392,682,755, of which £325,375,507 has been raised, leaving £67,307,248 to be raised. 15,659 miles constituted the total length of line authorized down to the end of 1858; but 1,610 miles have been abandoned; 9,506 miles of the line were open at the end of last year, and 4,543 miles (duly authorized) remained to be opened. 6,976 miles were open on the 31st of December last in England, 1,342 in Scotland, and 1,188 in Ireland. The narrow gauge is quite in the ascendant, seeing that, of the 9,542 miles of line open, 6,352 miles were narrow gauge, 749 only broad gauge, 261 mixed gauge, and 1,180 "Irish" gauge. Of single lines, there were 2,088 miles of narrow, 255 of broad, 52 of mixed, and 753 of "Irish" gauge. Of 426

miles of new line opened in 1858, 372 were laid with only one line of rails, 880 miles of new line were reported to be in course of construction on the 30th of June, 1858, and of these, 219 miles were opened before the last day of the year. 38,546 persons, an average of 43.79 per mile, were employed on the 30th of June, 1858, upon the lines in course of construction. The length of line open for traffic in the United Kingdom on the 30th of June, 1858, was 9,323 miles, and the number of persons employed thereon amounted to 109,329 persons, or 11.92 per mile.

£325,375,507 was the total amount raised for railways on the 31st of December, 1858, representing an expenditure of £34,243 per mile of railway opened. It is assumed that on an average 6 per cent. of that expenditure has been for Parliamentary and legal expenses, 18 for land and compensation, 66 for works, and 10 for rolling stock.

It is worthy of notice that, although the cost of railways in the United Kingdom has averaged £34,243 per mile—viz: £38,779 in England, £27,532 in Scotland, and £15,061 in Ireland, the average cost of lines of railway for which acts have been obtained since 1848, and which are now opened for traffic, has amounted to £10,500 per mile—viz: £12,600 per mile in England, £8,700 per mile in Scotland, and £6,600 per mile in Ireland. Of the total amount of money raised, £81,683,179 has been raised by loans, £61,854,547 by preference shares, and the remainder—£181,837,781, by ordinary share capital.

The gverage rate of dividend on the whole of the ordinary share capital in railways invested, was 3.06 last year, against 3.60 in 1857, and 3.40 in 1856. It has always been 3 and a decimal since 1852; in that year it was 2.40; in 1851, 2.44; in 1850, 1.83, and in 1849, 1.88. The average interest on the preference capital and loan was 4.63 last year; it ranged at 4 and a decimal from 1851 to 1858; in 1850, it was 5.00, and in 1849, 4.94. The percentage of the gross receipts (less working expenses) to the total amount of capital and loan has ranged from 2.83 to 4.06. It was 3.75 last year.—“It may be assumed,” says Captain Galton, “that so long as the proportion of the net receipts to the capital expended increases in each year, the property is in a sound condition.” Last year, however, the net receipts unfortunately exhibited a decrease.

The proportion of passenger traffic to the whole traffic, was 43 per cent. in England, 36 in Scotland, and 57 in Ireland; 139,193,699 persons were conveyed by railways last year, against 139,008,888 in 1857. The receipts from passengers amounted to £10,376,309, against £10,592,798 in 1857. The receipts from goods, cattle, minerals, parcels, &c., in 1858 amounted to £13,580,440, against £13,581,812 in 1857, which represents £1,458 per mile in 1858, compared with £1,523 per mile in 1857. The total receipts from goods, cattle, minerals, parcels, &c., may be divided as follows, viz: £7,711,350 was for the conveyance of 25,593,996 tons of merchandise, £4,046,061 was for the conveyance of 48,396,501 tons of minerals, £501,398 for the conveyance of 11,206,110 head of live stock, and £1,321,631 for the conveyance of parcels, &c. Although there has been, on the whole, an increase in the receipts for goods, minerals, live stock, &c., in 1858 over 1857, the stagnation in trade caused by the panic, had a perceptible effect upon the receipts of the year ending the 31st of December, 1858; in this year there was a diminution of £70,393 in the receipts on account of general merchandise, as compared with the receipts of the year ending the 31st of December, 1857; this occurred entirely in

England and Scotland. The traffic in live stock also showed a decrease of £22,350 in England, and £1,097 in Scotland, which was reduced in the general total to £15,960 by an increase of £7,487 in Ireland. The total receipts from all sources of traffic have amounted, in England and Wales, to £20,244,085 for 2,939 per mile in 1858, against £20,527,748 or £3,105 per mile in 1857; in Scotland to £2,536,933 or £1,949 per mile in 1858, against £2,501,478 or £2,040 per mile in 1857; and in Ireland to £1,175,721 or £1,041 per mile in 1858, against £1,145,384 or £1,076 per mile in 1857. The aggregate receipts from all sources of traffic for the whole kingdom having been £23,946,749 or £2,572 per mile in 1858, against £24,174,610 or £2,715 per mile in 1857. Of the 140,000,000 passengers (in round numbers) conveyed last year, 18,302,384 were first class, 41,693,289 second class, 79,145,464 third class and Parliamentary, and 52,562 holders of annual or season tickets.—The other “live stock,” included 2,323,305 head of cattle, 6,938,260 sheep, and 2,048,619 pigs.

The general results of the traffic in 1858 exhibited by these figures are undoubtedly unsatisfactory, inasmuch as, while the length of railway in the United Kingdom has increased by above 500 miles, the receipts were actually less in 1858 than in 1857, by £217,861, and the working expenses averaged 49 per cent. of the receipts, instead of 47 per cent. as was the case in 1857. On some of the principal railway companies, however, the traffic has materially improved.

We have already dealt with “accidents.”—From the tables it appears that 1 passenger in 3,353,603 has been killed, and 1 in 332,204 been injured from causes beyond their own control during the year 1858. The proportion of killed and injured from similar causes to the number who traveled was 1 in 312,794.

RAILWAY ACCIDENTS IN GREAT BRITAIN.—During the half-year ended June 30, 1859, 9 persons were killed and 11 injured on all the railroads of the United Kingdom, open for traffic, by accidents, the causes of which were beyond their own control, while 51 were killed and 22 injured from want of caution or misconduct. There were killed 4 engine-drivers, 8 firemen, 10 guards, &c., 7 porters, no policemen, 4 gate and signal men, 2 switchers, 7 platelayers, and 7 laborers. These figures refer exclusively to servants of companies or contractors, the grand total being 60 killed and 33 injured. The total number of collisions and other accidents to trains in England, Wales, Scotland and Ireland, in the half year ended June 30, amounted to 27, (25 to passengers and 2 to goods trains,) and by these accidents 9 persons were killed, and 159 injured. No passengers appear to have been killed, but 149 were injured. Twelve of the accidents were due to collisions, seven to trains getting off the rails, four to fracture of axles, wheels, or machinery, one to running too fast into a station, and two to trains catching fire. Against this last most frightful contingency, there appears to be but little security. Together with this return there have been presented to the Board of Trade reports of engineers on certain accidents which occurred in the months of February, April, and May, 1859, (Part III.) A collision on the Great Northern Railway at Sleaford on the 13th of April, was due to the improper or irregular removal of some wagons by a man not in the employ of the company. A fireman was killed on the Brighton and South Coast line on the 11th of May, by coming into contact with the post of a gate at a level crossing near the city of Chi-

chester. The posts were to be shifted in consequence. An accident on the North-Western line, on the 26th of February, when the engine went off the rails on the outside of an S curve about three-fourths of a mile radius, and about one-fourth of a mile beyond the foot of the incline about a mile from Leamington, was due to deterioration of the strength of the machinery. “This lamentable accident,” says Capt. Ross, R. E., “affords another instance of the small dependance that can be placed on the resistance of trenails outside a curve to a bursting pressure, when any casualty interferes with the regular action of an engine, and I would urge that no time should be lost in remedying this defect on all the curves of the line. In other respects the line seems to me in good order.” The engine, No. 8, was one of Sharpe’s 22 ton engines. It was received 1847, and its mileage is returned as having been 238,000 miles to the date of the accident. Two accidents from fire also occurred on the same (North Western) line on the 11th and 21st of April. Both were doubtless caused by sparks from the engine, and the proper precaution is to abandon the practice of carrying luggage on the roofs of carriages, instead of in covered vans. The burning of coal in engines, moreover, has increased the liability of the luggage to be ignited, and endangers wooden viaducts and bridges not adequately protected. A boy was killed at a level crossing of the Midland (Nottingham and Mansfield) Railway on the 5th of May, and the erection of a bridge has been recommended by the Board. The Monkland Railways were found to be in a very unfit condition for the conveyance of passengers over the Ballochney inclines in June last. The traffic on those lines has been discontinued.—A collision on the Waterford and Limerick line, near Bausha, the 6th of April, was due to “a reckless system of working.” The misconduct of the directors is thus severely stigmatized by the Board of Trade:—“My lords,” writes Captain Galton, “direct me to state that it appears from this report that the directors, apparently with the object of effecting the petty economy of not having a separate wire and proper instruments, servants, and regulations for the telegraphic train service, have adopted a mode of working the single line which appears to place responsibility upon no one, and to be so fraught with danger, that it is providential that some serious accident has not happened long ago upon the line. My lords trust that the warning which the directors have received will induce them to alter at once so reckless a system of working; for, should any other accident occur under it, the responsibility of having occasioned it will rest upon the directors.”—*London News.*

CREDIT SALES.

The pressure of goods upon the market arising from the large imports, in face of the slack trade at the West, is producing a certain effect upon values. The quantity of goods imported this year, as we have had occasion to show in former numbers, is not so large taking the two years 1858 and 1859 together, as for the two years 1856 and 1857. Thus up to this time the imports into the port of New York this year have been one hundred and seventy millions; last year, in the same time, ninety millions. The average of these two years is one hundred and thirty millions, and the imports for the two years 1856 and 1857, averaged 161 millions. Thus for the supply of the two years 1856 and '57 there were imported sixty million dollars’ worth more than for the two years which have since elapsed.

This, with the same ability of the country to consume and pay for goods, would show a large deficiency in the supply imported. The same general ability to buy, does not, however, exist, since the West has been curtailed of the number of emigrants who carried funds thither, of the large railroad expenditure, and of the sales of its produce. The passenger movement has been very much reduced. As an illustration we may take the Galena and Chicago Railroad returns for July and June, of several years:

	Passenger.	Freight.	Miscel.	Total.
1856.....	\$173,304	264,130	2,990	440,335
1857.....	147,875	311,651	13,517	473,043
1858.....	268,583	87,057	9,371	368,011
1859.....	79,245	180,557	9,563	269,406

These figures indicate the decline in passenger traffic. This was composed to a considerable extent of emigrants and railroad builders, who consumed the farmers' produce on the spot at good prices, and which enabled the latter to buy goods and pay debts. That movement has now subsided, and the farmers instead of getting \$1 40 at the door get 60c. in Chicago, or \$1 00 less. The money of the emigrants, the funds of the railroads, and the expenditures of the speculators are no longer at the command of the grain growers, and they have to seek a market at lower rates and greater expense. These leave far less for expenditure in goods than they enjoyed in former years. It results that they are less disposed to sell their produce, and are more disposed to economize in their expenses and defer the purchase of goods until a more remunerative season. The new wheat at the West began to come in the first week in August. The receipts for three weeks in August, at Chicago, have been as follows:

	Flour—bbls.	Wheat.	Corn.	Oats.
1858.....	29,983	499,204	957,745	151,806
1859.....	30,933	388,396	333,638	350,697

The receipts at Chicago are from Wells' Express, and they show that out of the fullness of the large crops this year not so much grain has yet been sold as from the scantiness of last year's. So far it is evident that the producers of that region are not disposed to take present prices for their produce. The movement at Milwaukee points to the same results—the receipts of wheat amounting to 25,000 bushels only, against 169,000 bushels same week last year, and yet the crop of Wisconsin is estimated at the largest ever raised, being 14,000,000 bushels, or a surplus of 10,000,000 bushels for export. This large quantity, with that from Canada and from surrounding States, would in an active year be the foundation for an immense business in merchandise; but this year it has no such signification. The debts due from that region to the Eastern cities are large, but they are owed by persons who have no part or lot in the new crops. They are persons who depended on railroad expenditure and emigrant and speculative trade. That source is dried up, and the growers of produce are many of them those emigrants who expended money last year and the year before for that which they have now to sell. These persons, when they are able, hold the grain, and put off until another year the purchasing of goods. Those who look upon \$1 as the minimum price for wheat regard that grain at 40@50c. as the most profitable investment they can make. They will not sell where they have the facilities of holding. The stores to sell goods, find in this state of affairs longer credits, or until "another crop" necessary, and they insist upon longer time in their city purchasing. This has been in some cases granted in the city, and nine months' notes taken. The operation is, however, most haz-

ardous. It is taking the chances of crops and prices abroad, and of the course of the money market every where. Those who grant these long credits must, if the money market here rises, as it is quite likely to do for the want of that produce to export, to hold which the credit of goods has been granted, have their profits—and more too—ground off their year's business, if the credits they grant are ultimately collected.

It is very evident that the west can not hold its crops without capital. If it can obtain the goods it wants on credit without selling, why it uses the capital of the sellers of goods. These must find it somewhere, since the imported goods must be paid for, and there is thus created a demand which falls most heavily upon those who have been most indulgent in credit.—N. Y. *Economist*.

MONETARY AND COMMERCIAL.

Since our last there has been a continued stringency in money matters. The complaints relative to collections being general, and parties who have always heretofore been lenders are now borrowers. Such being the state of affairs in mercantile circles, the supply of currency in the hands of our brokers subject to discount purposes, is quite limited. Some houses report the indications of the last two or three days as favorable, although we acknowledge that for ourselves we can not see much prospect for any prominent improvement before next spring. The operations in pork and groceries will soon open, and absorb nearly \$6,000,000 of actual money in the course of one fourth of the year, a large portion of which will be held for some months for accumulative profits. It is well known that our Bankers feel themselves bound, and very justly so too, to accommodate these two classes of their customers during their investing season, these facts, coupled with the apparent slim chances of improvements in collections, render it certain that money will be "tight" for at least six months to come. Inside rates we quote same as heretofore 10@12, and street rates at what ever prices can be agreed upon.

In Eastern Exchange we have nothing new to note; it is in good demand, and, consequently, rather firm. New Orleans is dormant. We quote:

	BUYING.	SELLING.
New York Sight.....	40@45 prem.	40@45 prem.
Boston.....	40 prem.	40@45 prem.
Philadelphia.....	40 prem.	40@45 prem.
Baltimore.....	40 prem.	40@45 prem.
New Orleans.....	$\frac{1}{2}$ dis.	$\frac{1}{2}$ prem.
American Gold.....	30@35 prem.	40@50 prem.

Uncurrent Missouri is bought at $\frac{3}{4}$ dis., and Illinois, Wisconsin, and Iowa at $1\frac{1}{2}$ dis.

Relative to the operations of the N. Y. Stock Market, the *Courier and Enquirer* of Tuesday says:

The stock market to day has decidedly improved from that of last week, and prices at the First Board to-day range from $\frac{1}{2}$ to 1 per cent. higher than the closing prices on Saturdays. A sale of U. S. Fines, 1874, was made at 104 $\frac{1}{2}$. State Stocks were steady at former prices. Tennessee Sixes sold at Saturday's prices. Missouri Sixes improved $\frac{1}{4}$. California Sevens sold the same as on Friday. Brooklyn City Water Loan, \$10,000 sold at par. Erie 3d mortgage improved 1 from the last sale on Wednesday. Erie 4th mortgage sold at 38 $\frac{1}{2}$ against 36, the last quoted sale. Ill. Cent. Bonds improved $\frac{1}{2}$.

Railroad Shares were moderately active and at better prices. N. Y. Central shares opened at 81½ and closed at 81½, against 80½, the closing price on Saturday. Hudson River advanced ½. Reading advanced ⅞, with large sales. Mich. Central advanced ¼. Mich. Southern preferred ¼, Panama ½, Illinois Central 2½, with large sales. Galena & Chicago ¾, Chicago & Rock Island 1½, Cleveland & Toledo 1½ from sales on Friday.

The private advices by the steamer Persia give continued assurances of ease in the London Market. The offers for the new Indian Loan were largely in excess of the amount required.

Wm. Butler has entered upon his duties as Treasurer of the State of Illinois, in place of James Miller, resigned, and has receipted for the following funds as being in the treasury on the 1st inst :

State Revenue Fund.....	\$2,596 70
" Debt Fund.....	277,748 52
" Interest Fund.....	182,236 60
" School Fund.....	\$9,911 68
" Land Fund.....	92 18
Illinois Central Railroad Fund.....	58,137 68
Delinquent Land Tax Fund.....	4,311 26
Total.....	\$606,051 22

It appears that the amount in the treasury at that time, held as security for the circulating notes of the Banks of Illinois, was as follows :

Missouri	6 per cent. State Bonds.....	\$3,318,000 00
Tennessee	" "	1,186,000 00
Virginia	" "	807,000 00
Louisiana	" "	428,500 00
North Carolina	" "	338,500 00
South Carolina	" "	100,000 00
Georgia	" "	182,000 00
Ohio	" "	224 622 96
Kentucky	" "	20,000 00
Michigan	" "	239,000 00
Michigan	7 " "	50,000 00
United States 5	" "	55,000 00
Minnesota 8	" "	100,000 50
Iowa 7	" "	91,000 00
Illinois refunded	" "	1,000,000 00
	new internal improvement stock.....	337,535 54
	liquidated bonds.....	26,660 00
"	interest bonds.....	26,660 00
"	and Michigan Canal Bonds.....	287,400 00
Specie.....	" "	3,239 00
Coupons detached and overdue.....	" "	15,060 00
Total.....		\$8,926,535 92

The business of the Illinois Central R. R. for August, 1859, was as follows :

LAND DEPARTMENT.

Acres Construction Lands sold.....	1,511 97	for \$21,409 87
Acres Interest Fund Lands sold.....	80 00	" 2,725 72
Acres Free Lands sold.....	80 00	" 1,449 60

Total sales during the month.....	1,671 97 "	\$25,625 18
To which add Town Lot sales.....		1,106 90

Total of all.....	\$26,731 38
Acres sold since Jan. 1, '59....20,188 61 for	\$299,799 27
Acres sold previously.....1,229,835 33 "	15,637 148 95

Total.....	1,250,023 94 "	\$15,936,948 25
Construction Bonds cancelled in Aug., 1859..		\$17,000 00
" " " previously.....	1,148,000 00	

Free Land Bonds canceled in August, 1859.....	\$3,000	\$1,165,000 00
Free Land Bonds canceled previously.....	149,000	
	<hr/>	152,000 00

Total Bonds canceled up to August 1, 1859.....	\$1,317,000 00
Cash receipts in August, 1859.....	\$29,847 63
Do. since Jan. 1, 1859.....	363,085 00
Total cash and bonds received to August 31, 1859.....	\$3,037,982 50

TRAFFIC DEPARTMENT

Receipts from passengers.....	\$63,467 84
“ freight.....	96,789 90
“ mails.....	6,358 34
“ rent of road.....	5,215 00
“ other sources.....	5,198 97

Total receipts in August, 1859.....	\$177,030 00
“ “ “ 1858.....	202,953 00
“ since January 1, 1859.....	1,185,932 50
“ “ “ 1858.....	1,262,905 50

Original land grant, 2,595,000 acres; railway, 706 miles of main track, and 87 miles of sidings; 113 engines; 2,400 cars; funded debt, \$18,633,000; share capital, \$60 paid on 175,000 shares—\$10,500,000.

	1857.	1857.	1858.
Traffic.....	\$2,434,878 59	2,293,964 47	1,976,578 58
Working expenses.....	1,444,546 19	1,791,231 14	1,419,954 80
Balance.....	<u>\$990,332 40</u>	<u>502,733 43</u>	<u>556,623 78</u>

A correspondent of a Toledo paper, who signs himself "A Railroad Man," states that the Dayton and Michigan Railroad Company have refused to sell out to the express company a monopoly of the express business on that road. The correspondent says:

"The express freight to pass over that road, if carried by the railroad itself, charging every person the same rates, will yield to the road twice the amount of profit they will get for it from the express company, and the amount of freight of that character would be quadrupled if carried at the reasonable rates the railroad would charge."

IMPORTANT RAILROAD DECISIONS

LIABILITY FOR ACCIDENTS.—PRESUMPTION AS TO NEGLIGENCE.

The case of *Curtis, vs. the Rochester and Syracuse Railroad Company*, recently decided in the New York Court of Appeals, drew in question the legal presumption as to negligence in cases of accidents on railroads. Suppose an accident happens, and there is no evidence as to its cause; does the law presume that if proper care had been taken, everything would have gone safely, therefore, there was probably negligence, or does it presume that every servant of the company did his duty, therefore, the inquiry must have resulted from inevitable accident.

The case we mentioned was brought to recover for injuries suffered by plaintiff while traveling as a passenger on defendants' road. It appeared on the trial, that the train in which plaintiff was, ran off the track at a switch. The proof left it uncertain whether the switch was deranged, or the accident resulted from the spreading and breaking of the rails. There was no evidence that there was any visible defect in the apparatus prior to the accident. The plaintiff had a verdict, and the defendant appealed on the ground, the judge erred in charging the jury. What he said to them, it stated in the opinion of Judge Selden, of which the following is the substance, omitting some citations of authorities.—*Journal*.

SELDEN, J.—The judge charged the jury in this case, "that the fact of this accident occurring was of itself presumptive evidence of negligence on the part of the defendants." If, by this, the judge is to be understood as saying that, in cases of this kind, evidence of the mere happening of an accident, resulting in injury to the plaintiff, without proof of any of the circumstances under which it occurred, establishes, *prima facie*, the charge of negligence. I am not prepared to assent to the proposition. Carriers of passengers are not insurers; and many injuries may occur to those they transport, for which they are not responsible. They are, for obvious reasons, held bound to exert the utmost care and vigilance to secure the safety of the passengers; and are responsible for the slightest negligence.

But injuries may often happen through the fault or misconduct of those whose acts are in no way chargeable to them. In traveling in stage coaches, upon ordinary roads, such injuries would be very frequent, because, in such cases, the proprietors of the coach do not construct the roads, nor control those who travel upon them. For a large portion of the accidents, therefore, which result from defects in the road, or collisions with other vehicles, the proprietors would not be liable.

The carrier, however, is, in all cases, bound to provide a safe and secure carriage for the transportation of the passengers; and nothing can exempt him from his responsibility, but the existence of some latent defect, which no reasonable degree of foresight could guard against; and this obligation extends to every species of appliance belonging to the carrier and used by him in the business in which he is engaged. Consequently, whenever it appears that the accident occurred through some defect in the vehicle, or other apparatus used by the carrier, a strong presumption of negligence arises, founded upon the improbability of the existence of any defect which extreme vigilance, aided by science and skill, could not have detected.

The cases in which the carrier would be exempt from responsibility would be far less frequent where the transportation is upon railroads, than where it is upon common roads, because railroad companies have the entire control of the track, and of all engaged in its use. Still, accidents may occur from a multitude of causes, even upon a railroad, for which the company is not responsible. If obstructions are placed, by strangers upon the road, either through accident or design, the company is not responsible for the consequences, unless its agents have been remiss in not discovering them. The straying of cattle or horses upon the roads causes numerous accidents, which are not chargeable to the company. If a drunken man falls asleep, or a deaf man incautiously walks upon the road, in consequence of which a train is unavoidably thrown from the track, and as a passenger is injured, he is without redress as against the company. So if a careless driver, in crossing a track, fails to get his vehicle out of the way of an approaching train. How then can it be assumed, without proof of any sort, when an accident has occurred, that it was caused by some carelessness on the part of the agents of the company, and not by any or either of these numerous causes?

In regard to the carriages and other apparatus used for the carrying of passengers, railroad companies are under the same obligation as that already alluded to in the case of the carrier upon common roads. They make and own their road, and have the exclusive control of that, and of every part of the machinery and apparatus used in connection with it; passengers have no means of knowing nor any power of remedying its defects, but are forced to trust their lives and persons to the care and watchfulness of the agents of the company. The latter, therefore, is bound to see that the road and all its appurtenances are in perfect order and free from any defect which the utmost vigilance, aided by the highest degree of knowledge and skill, could discover or prevent.

Consequently, whenever it appears that the accident was caused by any deficiency in the road itself, the cars or any portion of the apparatus belonging to the company and used in connection with its business, a presumption of negligence on the part of those whose duty it was to see that everything was in order, immediately arises; it being extremely unlikely that any defect should exist of so hidden a nature that no degree of skill or care could have foreseen or discovered it.

If it be said that, upon the same principles upon which negligence is presumed in such a case, it should be presumed in every case, on account of the high degree of improbability that a serious accident of any kind should occur, without some degree of negligence; the answer is plain; and to present this distinction is the object of most that has been said. There may be a presumption of negligence in every case; but where nothing is known in regard to the cause of the accident, the negligence may as well have been that of some one residing in the vicinity of the road, or of some stranger, of whom numbers come in contact with it every day, as of any of the employees of the company; while if it appears that the mischief has resulted from a defect in some part of the apparatus of the company, the negligence, if any, must have been that of some one for whose acts and omissions the company is liable; it being well settled that the carrier is responsible for the negligence, or want of skill, of every one who has been concerned in the manufacture of any portion of its apparatus. (*Hegeman vs. The Western Railroad Co.*, 3 Kem., 95; *Ware vs. Gay*, 11 Pick., 106; *In-galls vs. Bills*, 9 Mete., 1.)

The cases in which it has been said that a presumption of negligence arises from the mere proof that an accident has occurred, will appear, if examined, not to conflict materially with these principles; and some of them are, I think, illustrative of the distinction just suggested.

It does not follow from what has been said, that the judgment in this case is to be reversed for error in that part of the charge referred to. The very first witness called by the plaintiff upon the trial, proved enough of the circumstances of the case to warrant the presumption of negligence. It was clear, from his testimony, that the accident was caused by some defect in the track, and, in all probability, by the misplacement of the switch. It was material, however, whether it was this, or the spreading of the rail, as the company sought upon cross-examination to show, which threw the train from the track. In either case the presumption of negligence would arise.

The judge was fully warranted in instructing the jury, that the occurrence of the accident, under the circumstances disclosed by the evidence, authorized the presumption of negligence. Did he do more than this? He did not say to the jury, in the language of Judge Bell, in *Laing vs. Colder*, that "the mere happening of an injurious accident" raises a presumption of negligence; but his words were, that "the fact of this accident occurring," was presumptive evidence, &c. The effect is attributed, not to any and every accident, but to this particular accident. A verdict like this, sustained as it is by ample evidence, ought not to be disturbed by a construction which would make the charge a mere abstraction, not called for by the exigencies of the case, provided any other interpretation is admissible. There is no reason to suppose that the jury were misled. They were carefully instructed that if the injury was the result of pure accident, without any neglect of the defendant, the plaintiff could not recover; and, under the view which has been taken, the charge, so far as the exception under concerned, may, I think, be properly sustained.

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANA OR SANDOVAL

FOR

Decatur, Springfield,
Bloomington, Peoria,
Burlington, Quincy,
La Salle, Rock Island,
Dixon, Galena,
Prairie du Chien, St. Paul, and
St. Anthony,
And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANA for all the above points. Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all

TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

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New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,

Gen'l Southern Agent, Cincinnati.

W. P. JOHNSON,

Gen'l Passenger Agent, Chicago.

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WROUGHT IRON

ARCH BRIDGES

—AND—

Corrugated Iron Roofs

ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.

Spt. 2.

MOSELEY & CO.

June 21, 1859.

Cincinnati, Hamilton and Dayton



RAILROAD.

FOUR TRAINS

LEAVE THE SIXTH STREET DEPOT DAILY

TRAINS RUN THROUGH TO RICHMOND, LIMA, SANDUSKY, AND DELAWARE WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND NORTH-WESTERN CITIES.

(Columbus time, which is seven minutes faster than Cincinnati.)

6 A. M. EXPRESS TRAIN—For Cleveland and Pittsburg, via Delaware, makes close connection at Crestline for Pittsburg, Baltimore, Philadelphia, and New York; and at Cleveland for Dunkirk, Buffalo, Boston and New York. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 7:20 P. M., Quincy and Galena at 7 A. M. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Munice. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

8 A. M. MAIL TRAIN—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STEAMER FOR DETROIT; at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at Delaware with the C., C. and C. Road, for Cleveland and points East. Also connects with Junction Railroad at Hamilton for Oxford.

4:30 P. M. TRAIN—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Also, connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago. Also connects with Junction Railroad at Hamilton for Oxford.

6 P. M. TRAIN—For Dayton, Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 8 A. M.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; at the new Ticket Office on West side of Vine street, between the Post Office and the Burnet House; or at the Sixth Street Depot.

D. McLAREN, Superintendent.

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circulars, which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the retort is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet,.....	\$300 00
do do do 350 " " " " " " " " " "	335 00
do do do 400 " " " " " " " " " "	375 00
do do do 500 " " " " " " " " " "	450 00
do do do 600 " " " " " " " " " "	525 00
do do do 700 " " " " " " " " " "	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, as now in operation in several States, apply to

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Feb. 24th, 1859.

APPLEGATE & CO.,
Booksellers, Publishers, Stationers & Blank Book Manufacturers,
43 Main St. Cincinnati, O.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Booksellers, Country merchants, Teachers, and others to our varied and extensive stock of School, Classical, Theological, Scientific, Standard, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the leading publishers, the principal manufacturers of Paper and Stationery, and our superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

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Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, Envelope, Manilla and Tea wrap-boards, Envelopes, Penholders, Pen-racks, Copying Books, Ink and Sures, Sealing Slates, Mucilage, Book rests, Bill envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files: Date Calendars, together with all other articles used in the counting-house.

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To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly paged, including all sizes, from the small memorandum book to the large Superior Ledger, and variety of styles workmanship, order of any design, with or without ruling and warranted to be of perfect quality and durability of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

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We are prepared to Print and Bind books in and in any style desired, at rates as low as quality of work cut in this where. Our executing these branches of the trade a sample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Dray receipts, Cards, Circulars, or other printing, will that we do such jobs despatch. Orders re-

Stereotype, of any description that may be desired as the same can be executed or else facilities for branches of the trade a sample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bill Heads, Dray receipts, please bear in mind with neatness and despatch. Orders re-

Publishers,

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, *Clark's Compendious Dictionary*, *Rollin's Ancient History*, *Plutarch's Lives*, *Josephus*, *Spectator*, *Chain of Sacred Wonders*, *Familiar Science*, *Webb's Monitor*, *Solden's German*, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

3 MAIN STREET CINC.

W. HARVEY'S SAFETY JOINT For Coupling the Ends of "T" Rails. PATENTED, NOV. 2, 1858.

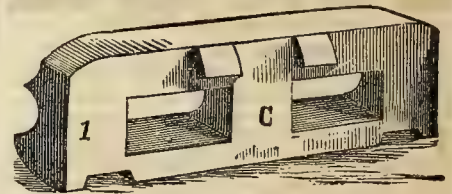


Fig. 3 is a perspective view of Joint Rail. Fig. J is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

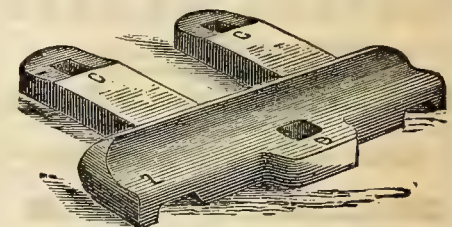
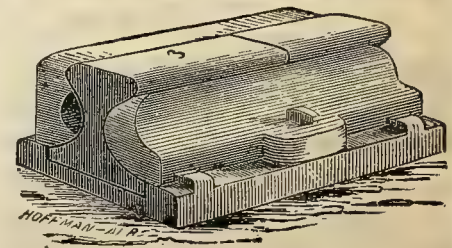


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that one part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly free road, thereby doing away with the breaking of rails, wheels, and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear of the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
41 Jefferson-street, Albany, N. Y.
T. WRIGHTSON, AGENT, Cincinnati O.

PROSSER'S PATENT
ORIGINAL LAP-WELDED
IRON AND STEEL BOILER TUBES,
SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

SOLE IMPORTERS,
PROSSER'S PATENT SURFACE CONDENSERS for high pressure steam, with sea or other bad boiler water, gauges, 3-cutter drills, counter-sinks, tube end cutting bars, expanders, tube scalers, steel wire and whalebone brushes, pull lever wrenches, tubes—plain or enameled, screwed together for Artesian Wells, HOLLOW SLABS for various purposes, Steel for Rollers.
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MANUFACTURERS OF

CHILLED WHEELS

AND
TIRES,
For R. R. Cars & Locomotive Engines,
ARE PREPARED TO

Execute Promptly Orders to any Extent
FOR THEIR
CELEBRATED WHEELS,
EITHER SINGLE OR DOUBLE PLATE,
WITH OR WITHOUT AXLES.

WHEELS FITTED
To Hammered or Rolled Axles,
In the best manner, at the shortest notice, and on the
Most Reasonable Terms.

ad2

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JUST PUBLISHED

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POST-OFFICE GUIDE!
For Post-Masters and Business Men.

CONTAINING
A Complete List of Post-Offices in the United States and Territories, arranged by States and Counties; A Complete List of all Distributing Post-Offices; Rates of Foreign and Domestic Letter Postage; Rates of Printed Matter, Transient and Regular; Abstract of the Laws and Regulations of the Post-Office Department, &c., &c.

COMPILED BY E. PENROSE JONES,
Late Assistant Post-Master at Cincinnati.
Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.
U. S. BLANK AGENCY, CINCINNATI POST-OFFICE, {
January, 1859.

This work has been carefully compiled and corrected by E. PENROSE JONES, Esq., late Assistant Post-Master of the Cincinnati P. O., from the Records in this Department, and other sources, and contains the most complete list of Post-Offices especially of the Western, North-Western, and South-Western States, yet published.

MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an active pamphlet of about 100 pages. The entire matter is kept standing in type, and as the compiler is promptly advised of all New Offices, Changes and Regulations of the Department, the information is corrected up to the last day of publication, an advantage possessed by no other work of the kind.

OBSERVE, That this list is arranged by States and Counties, making it especially valuable to business men. No similar arrangement has been published since 1836. There are 3000 more offices in this than in any book heretofore issued. The Price is one-half that of any work of the kind now published.

Single copies sent by mail (postage prepaid) to any address, upon receiving Twenty-five Cents in Silver or Postage Stamps. Five Copies sent for \$1.00, or Twelve Copies for \$2.00.

Address, C. S. WILLIAMS,
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Cincinnati, Ohio.
Mar10.11

WHEELER & WILSON'S



SEWIN G MACHINES.

W. M. SUMNER & CO., cor. Fourth and Walnut Streets, second floor, Cincinnati, Ohio.

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Louisville, Ky., Columbus, O.,
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We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being ALIKE ON BOTH SIDES, impossible to ravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions, free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

Send or call for a circular, containing all particulars, prices, testimonials, etc.
WM. SUMNER & CO.
Feb12.

1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th Corby, Gossin & Co.'s make, for sale very low by
TRABER & AUBERY,
7 Public Landing

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND
Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions. Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded the compound Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. [June 18, 1855—1

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co., Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase
Ag. 4, m. 6.

FREEDOM IRON COMPANY,

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods,

Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

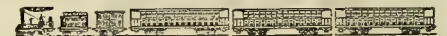
JOHN A. WRIGHT, Sup't.

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works. June 9.

New Time Table

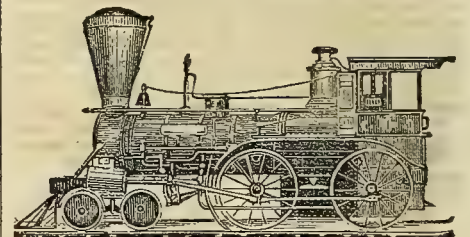
OF THE

NEW YORK CENTRAL R. R.



	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp.	7 00 A. M.	7 00 P. M.	7 00 P. M.
Mail	9 00 A. M.	12 50 A. M.	
New York Exp.	11 15 A. M.	9 00 P. M.	9 00 P. M.
Night Exp.	5 00 P. M.	4 00 A. M.	4 00 A. M.
Utica Accom'n.	6 00 P. M.	Ar. U. 10 00 P. M.	
N. Y. Mail	11 15 P. M.	10 00 A. M.	10 00 A. M.
	Leave Buffalo.	Leave Bridge.	Ar. Albany.
New York Exp.	5 15 A. M.	5 15 A. M.	3 30 P. M.
Steamboat Exp.	8 00 A. M.	8 00 A. M.	8 00 P. M.
Mail			2 30 P. M.
Cleveland Exp.	6 00 P. M.	6 00 P. M.	4 40 A. M.
Cincinnati Exp.	11 00 P. M.	11 00 P. M.	8 30 A. M.
Utica Accom'n.			10 00 A. M.

**CINCINNATI
LOCOMOTIVE WORKS.**



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.
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MOORE & RICHARDSON.

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MILITARY INSTITUTE**

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The course of study is that taught in the best Colleges but more extended in Mathematics, Mechanics, Machines, Construction, Agricultural Chemistry and Mining Geology; also in English Literature, Historical Readings, and Modern Languages, accompanied by daily and regulated exercise.

Schools of Architecture, Engineering, Commerce, Medicine, and Law, admit of selecting studies to suit time means, and object of Professional preparation, both before and after graduating.

The twelfth annual term is now open. Charges, \$102 per half-yearly session, payable in advance.

Address the Superintendent, at "Military Institute, Franklin Springs, Ky.," or the undersigned.

P. DUDLEY,
President of the Board;

Jan 5th.

The Railroad Record.

E. D. MANSFIELD,
T. WRIGHTSON, } Editors.

CINCINNATI:

Thursday Morning, Sept. 29, 1859.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

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If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

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Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

RECEIVER'S REPORT OF THE OHIO CENTRAL RAILROAD FOR JULY.—The Receiver of the Ohio Central Railroad yesterday made to the United States Circuit Court his report of the business of the Road during the month of July.—The recapitulation of the accounts show the following:

DEBIT.

General expenditures, incurred prior to May 1, 1859.....	\$35,856 70
General expenditures incurred in May.....	4,002 65
" " " June.....	16,533 74
" " " July.....	595 08
Payments on account of pay-rolls in May and June.....	34,650 00
Balance on hand.....	7,342 84
	\$98,979 01

CREDIT

Balance on hand to date of July 1.....	\$5,102 34
Amount paid on account of pay-roll and not yet entered as disbursement.....	49,550 00
From business prior to May 1, 1859.....	3,089 10
From passenger business since May 1.....	17,720 41
From freight business since May 1.....	20,134 03
From express business since May 1.....	588 68
From mail business since May 1.....	888 18
From other sources.....	1,906 25
	\$98,979 01

PIKE COUNTY R. R.—Quite an excitement prevailed in Hanibal, on the 12th and 13th of this month, in relation to the appropriation of another hundred thousand dollars, that was required of the citizens in order to complete this road. An election was held in the different wards, to determine by the voice of the people, whether or no, if it was their desire that this enterprise proceed. They manifested their acquiescence by giving a majority of 203 in favor of the appropriation.—*Western Railroad Gazette.*

REVIEW OF THE MANUFACTURES OF CINCINNATI.

In our last number we reviewed the commerce of Cincinnati, in regard mainly to the articles of domestic and foreign produce employed in consumption. We shall now review more particularly those, which enter into the production and export of manufactures. Among these, one of the most important is that of Iron; but the iron manufacture has been for two years very much depressed, under the effects of the Crisis of 1857, and the cessation in the construction of Railroads. The consequence of this depression, will be seen in the following table of imports, viz:

IMPORTS.

	Tons.	Pieces.	Bundles.	Pigs.
1846.....	1328	124,955	31820	13685
1847.....	1685	187,125	33463	15868
1848.....	827	197,120	34213	21145
1849.....	1768	187,864	29389	15612
1850.....	2019	176,832	53,168	17211
1851.....	2370	226,003	66809	16110
1852.....	10111	191,007	37678	20846
1853.....	14124	204,001	665121	30179
1854.....	14256	380,405	72730	41847
1855.....	3690	505,92	63735	20613
1856.....	3757	741,037	113546	41016
1857.....	6181	843,499	130,580	39484
1758.....	5318	27,997	110980	23153
1859.....	2974	296,360	174291	33960

It will be seen that the imports of iron, especially of pigs, is not as great, as in 1854. The import of Pig Iron is a very good indication of the iron manufacture of the city, which is less than in 1854, but greater than in 1850; and about double what it was ten years since. The present depression of the iron manufacture will gradually pass away. The facilities afforded by Cincinnati for the profitable development of this branch of industry, are not exceeded, by those of any other place in the West.

The next branch of manufactures, in importance, and, perhaps, the most interesting of any, is that of FURNITURE. The following Statistics we take from the Cincinnati *Price Current*:

In our exports, until the year 1857-8, no account had been kept of this article. In the commercial year, ending August 31st, 1858, there were exported from this place 10,282 doz. chairs, and 90,139 packages and pieces of furniture. During the past year the exports were 10,218 dozen chairs, and 171,205 pieces and packages of Furniture. The pieces of Furniture embrace Bureaus, Tables, Sofas, etc.; and the packages, Bedsteads, Fine Chairs, and other articles of a fine and fancy nature. Those chairs specified in the shipments are common kinds.

In 1856, the whole number of establishments engaged in this business was sixty seven, and the total value of Furniture Manufactured, \$3,560,000. There are now eighty-six establishments engaged in the business, some of them, as heretofore, upon a most extensive scale, and the total value of the Furniture turned out by them the past year, is \$5,587,000.

The Furniture made here is shipped to all sections of the Western country, and in all the leading cities branch establishments are kept for its sale. The most extensive Furniture house in St. Louis, probably, is a branch of one in this city. The fact is, Cincinnati Furniture is to be found in all the cities, towns,

villages and hamlets throughout the West. The great mass of the inhabitants of those States lying between the Gulf of Mexico, on the South, and the Great Lakes on the North, and the Allegheny Mountains on the East, and the Rocky mountains on the West, lie down each night upon Cincinnati bedsteads, eat and drink off of Cincinnati tables, and seat themselves around the convivial board or domestic hearth, upon Cincinnati chairs.

Another article of Manufactures in which Cincinnati relatively exceeds all other places, in the West, is that of CLOTHING. This business is mostly carried on by Jews, who have found Cincinnati, on the whole, the most convenient and profitable place in which to carry on that business. A very decided step in this business, has been taken, by the introduction of Sewing Machines, which have really increased the business rapidly, and (which seems quite remarkable,) increased the hands employed in it. According to the Statistics of Mr. Cist, in recent examinations, there are 1,000 sewing machines employed in Cincinnati; 12,000 persons, and an annual production of *fifteen millions of dollars*, in clothing. The commercial statement says:

The manufacture of Men's Clothing constitutes one of the most important branches of the industry of Cincinnati, and one which has increased with a rapidity quite astonishing. It is but a few years ago, comparatively, since this business assumed an important position, yet the value of Men's Clothing manufactured here the past year, was *fifteen millions* dollars. In August, 1856, there were fifty houses engaged in the wholesale clothing business; there are now sixty-six, and whilst the number has increased, the business of each house has also increased, so that the gross increase in the quantity produced the last three years, may be put down at forty per cent. Branches of the various houses are located at Louisville, Chicago, St. Louis, all the important towns on the Missouri and Mississippi Rivers, and at various places in this State, Kentucky, and Tennessee, so that the trade, in this way, is largely extended, and as prices at those branch houses are the same as here; adding freight, local competition is out of the question.

In addition to the above mentioned houses, there are 104 others, where the business is carried on upon a less extensive scale, and where ready made clothing is retailed. In many of those the business is carried on quite extensively, as the quantity retailed each year is large, supplying not only the city, but an area of twenty to thirty miles around. In 1856 the total value of the clothing manufactured was \$11,000,000; it is now, as has been already stated, \$15,000,000.

This is hardly a sufficiently broad statement, as to the distribution of this product; for the manufactured clothing of Cincinnati is sold every where in the West. It may be found in every village.

Of FLOUR, the statement says:

There are ten flour mills in this city, including three located in Covington on the opposite side of the river. The working capacity of those mills is 476,500 bbls. per annum. They did not, however, work all the time the past year, and consequently did not make this amount. A large quantity of the Wheat they use comes in by wagons, and does not

therefore come into our imports. It will be seen that the exports of Flour exceed the imports by about 4000 bbls., and as the quantity taken for the city consumption and suburbs is about 260,000 bbls. annually, the quantity manufactured by the mills the past year can not be less than 265,000 bbls.

LARD OIL is another article largely manufactured in Cincinnati; but the high price of Lard has made the price of oil so high, that the manufacture can not increase much; for other kinds of oil are brought into competition with it.

The packing of Pork and Provisions is, in Cincinnati, placed under the head of Manufactures, although with doubtful propriety. It does, however, employ a great many persons, in cooperage, packing, hauling, etc., etc. The primary element of this business is the Hog; and hence, the importation of hogs, which is almost precisely the number packed.

The following table shows the number of hogs packed in this city each season, for the last twenty-seven years:

Years.	No.
1833.....	85000
1834.....	123000
1835.....	162000
1836.....	123000
1837.....	103000
1838.....	182000
1839.....	196000
1840.....	95000
1841.....	160000
1842.....	220000
1843.....	250000
1844.....	240000
1845.....	196000
1846.....	205000
1847.....	250000
1848.....	475000
1849.....	410000
1850.....	392000
1851.....	334000
1852.....	352000
1853.....	361000
1854.....	421000
1855.....	355786
1856.....	405396
1857.....	344512
1858.....	141677
1859.....	322826

For the last six years, the business has stood at nearly the same point; averaging nearly 400,000 hogs per annum. In the future it will not improbably diminish gradually; for the hog is an animal which will always be found most numerous in new countries, and therefore they will recede from the more dense population, and be packed more extensively in the frontier States.

The cost of hogs alone packed at Cincinnati in 1858-9, was about \$5,000,000. Adding the cooperage, salt, labor, etc., in, and the cost of the manufactured article probably reached \$8,000,000.

The Manufacture of CANDLES and SOAP ought not to be omitted; for no one manufacture in Cincinnati has increased more steadily, or with greater profit, than this.

The following table shows the exports of Candles and Soap from this place, for fourteen years, ending August 31st, each year:

Year.	Soap, boxes.	Candles, boxes.
1846.....	2768	3757
1847.....	1000	16622
1848.....	1165	29189
1849.....	11303	36440
1850.....	17443	67447
1851.....	21553	113412
1852.....	28033	121727

1853.....	37036	139799
1854.....	39645	15168
1855.....	34246	139191
1856.....	41282	191728
1857.....	41783	166840
1858.....	51768	133357
1859.....	62790	220000

Taking from 1847, a period of twelve years, and taking the average of each four, and we have this result:

	Soap, boxes.	Candles, boxes.
1848-1851.....	15,000	60,000
1852-1855.....	35,000	137,750
1856-1859.....	49,500	176,750

This little table shows a great and regular enlargement of this business, and it is likely to continue.

We might easily enumerate many branches of manufacture; but these are enough to show how extensively and advantageously, this city is engaged in Manufactures, and how largely its Domestic Industry is developed in this department.

TRIP WEST—BALTIMORE TO CINCINNATI.

EDITORS OF RECORD:—On Friday, at 4 o'clock, I took the "sleeping car" for home—found a larger "chambermaid" in boots, than when I went "East"—but the same sickening stench of oils, gas and spittoons, boots and—feet, with no ventilation as in the other car; villainous confinement, entirely unnecessary, and injurious to health, as it destroys all comfort while there.

The same miserable arrangements for feeding prevail this way as the other. You take car at 4 o'clock, and sup at 8—two hours later than it ought to be had. Then at 4 o'clock in the morning you are called for breakfast—two or three hours too soon. Then at 12 o'clock, noon, you dine at Zanesville. Of course, everybody anathematizes the company for such uncomfortable arrangements—amounting, in the aggregate, to curses enough to render doubtful the happiness of any of its members, either present or future.

The road appears to be very carefully run, by good machinery and men, and comes to the river on time. From Bellair to Columbus, every thing hung back; an hour and a half behind time at Columbus.

At Newark, took on passengers from the smashed up express train, over the Steubenville and Indiana road. Several of the passengers described the smash as frightful, but no one was seriously hurt. They said the ROTTEN TIES let the rails apart, the ties snapping off like so much rotten wood, breaking the tender and all the cars to pieces. Of course there was no one to blame, unless, indeed, the farmers living near here, who said, as they came to look at the wreck, that they had known the ties were rotten, and had talked about it before. Perhaps it would be well to punish those farmers for knowing it—the "company" having been punished by the breaking of their cars.

From Columbus, the Little Miami put us through in best time.

Advice to those going over the B. & O. route: put a bottle in your pocket, with some thing to eat in it, and so be independent of "the company's" eating arrangements, and do not hallucinate yourselves that you will have a comfortable sleep when you pay 50 cents for a berth. Yours, TRIPPING.

DEVELOPMENT OF S. W. ALLEGHANIES.

Everything pertaining to the development of our common country must be interesting to those connected with railroads. Hence, no apology is needed for the appearance of another article from the pen of Prof. CHRISTY, in relation to the adaptation of the S. W. Alleghanies to the production of Wool, Fruit, and Grapes.

DEVELOPMENT OF S. W. ALLEGHANIES.

BY DAVID CHRISTY.

In 1855, 1856, and 1857, the writer visited the western portion of North Carolina, with the view of investigating its mineral resources. The result was the organization of two mining companies, who proceeded to secure a large amount of lands, which had been originally procured on account of the mineral indications they were supposed to present. Upon a few of the tracts purchased, copper ores had been found, and in two of them, in considerable quantities; though in none had the testing been extended to over thirty feet in depth.

In March, 1859, another visit was made to the same region, with the view of examining more fully, the adaptation of its lands to the growth of the tame grasses, the production of wool, and the cultivation of fruit and the grape. In addition to these objects, attention was directed to the extent of the water power and the quality and variety of the timber.

In proceeding to give a statement of the facts collected, so that the reader may be able to comprehend the force of the deductions made, it will be necessary to present a brief outline of the Geology of the region under consideration; and, in this connection, it may be well to give some facts in relation to its mineral resources.

The rocks of the South-West Alleghanies are of the same age, geologically considered, as those of the portions of Tennessee, Kentucky, Ohio, and other Western States, where the strata are horizontal; but they have been upturned upon their edges, at various angles of inclination, and re-crystallized by heat, so as to alter entirely their general appearance. The change thus produced upon them is designated in geology by the term *Metamorphic*: that is to say, what were originally beds of slate or clay, have been metamorphosed by heat into crystalline schists and slates. It was during the period when the rocks of the South-West Alleghanies were undergoing this change, probably, that the metallic veins were injected into them. They are regularly stratified, and maintain, throughout extensive ranges, great uniformity of structure and mineral composition. They are composed, mainly, of mica schists, talcose slates, clay slates, and conglomerates. The strata are tilted up at a high angle, mostly, and dip to the south-east, generally—the strike, or range, being from north-east to south-west. Veins of quartz rock, from a few inches to more than ten feet in thickness, are protruded, occasionally, through the fissures in the rocks; and in many places, give a fair yield of gold,

either from the quartz itself, or from the slates at its sides, or from both.

In Cherokee county, North Carolina, there are a few ranges of metamorphic limestone, constituting, in places, a very good marble. It is often as fine grained, and as white, and takes as fine a polish, as any in our Northern marble yards: but the surface specimens only, have, as yet, been used, and they have some flaws which mar their beauty and durability. At a greater depth it will be more compact, it is thought by marble workers, and will supply an excellent article to the country. Its dip and strike correspond with those of the schistose rocks with which it is associated.—This limestone includes deposits of lead ore, combined with silver—the *argentiferous galena*—and has also associated with it, in places, some rich deposits of gold. The collections of this metal, thus far, have been by surface washings, and the yield, on Valley river alone, is estimated at more than a half million of dollars. A wealthy company, of Nashville, Tennessee, are now at work upon this limestone range, in the confident hope of succeeding in obtaining remunerating quantities of both silver and gold. The best evidence of the opinion they have formed of its prospective mineral value, exists in the fact that this company have secured the interest in all the mining lands for several miles along the limestone belt.

The same company have also purchased a gold mine, on a quartz vein, some eight or ten miles south of Murphy, the county seat of Cherokee county; and were expecting during July last, to have in operation twenty-four stamps for crushing the quartz. These enterprises are under the control of Dr. Warne, Col. Bilbo, and Mr. Calhoun, who possess the energy, talent, and capital, necessary to accomplish their designs.

The copper mines of Cherokee county have not been developed to any great extent, on account of the lack of means in those who undertook the task. But such has been the extent of the explorations of the mineral *leads* eastward and westward of this county, and such the success in discovering heavy mines of copper ores, that little doubt remains of ultimate success in its territory. For full particulars on this point the reader is referred to the report of the Nantahala and Tuckasege Mining Companies.

Running parallel with the limestone belt, there is a bed of iron ore, inexhaustible in quantity, and of the very best quality. It is smelted in small furnaces for local consumption.

Such has been the quantity of gold obtained in several places along the quartz veins, that experienced California miners have been attracted to this county, and works have been erected for testing the placers by the hydraulic process. The many quartz veins in this county will, doubtless, yet be found to yield gold at numerous points along their course.—This is inferred from the fact, that more or less gold may be collected from the surface, almost anywhere in the vicinity.

The great drawback upon the prosecution of copper mining in this region is, the lack of means of transportation. But as soon as the Roben Gap Railroad shall be finished, the work will progress rapidly—there being several companies who are only awaiting that event to commence their operations.

SOILS AND SUB-SOILS.

Soils are derived from the disintegration and decomposition of rocks. Where no drifted materials prevail, they are the product of the rocks *in place*. In the progress of

ages, the rocks which constitute the earth's crust have undergone great changes from aqueous denudation, as well as from volcanic forces. The valleys are often the result of denudation, while the mountains are composed of rocks of various kinds, often left in the horizontal position in which the strata were originally deposited in the primitive oceans. The depths to which the denuding agency has ploughed out its furrows, are proportioned to the force it possessed and to the resistance offered by the rocks. Sometimes whole geological formations are found to be washed away from vast areas, while in others they are left standing in mountain ranges as perpetual witnesses of the immensity of the power possessed by currents of water in motion. The evidences of the action of denuding forces are not limited to the horizontal strata, but prevail also where they have been upheaved by volcanic agency, and remain fixed in a vertical position, or at various angles of inclination. Whether the strata are left arranged horizontally, or have been disturbed and rest upon their edges, the work of decomposition constantly progresses. In the crystalline and massive limestone and sandstone, the process of reduction is very slow, and in the shales, schists, and slates, it is generally rapid. The whole surface, at the close of the period of denudation, appears to have been left, mainly, as a vast waste of naked rocky valleys, surrounded by craggy precipices from a few hundred to many thousand feet in height. In this condition did the work of disintegration begin, and the production of soils commence upon our continent. But the giving to the hills and vales a capacity to sustain vegetation was not left to the slow process of decomposition alone. The Diluvial epoch, with its floods of waters, often scattered over the surfaces of both hill and valley, a rich profusion of boulders, pebbles, clays, and sands, so well intermixed, usually, as to supply at once the materials of soils and sub-soils. But as this formation is not universally outspread over the country, there are districts which are left to perform the task of supplying their own covering of earth to the rocks. This is the state of things, mainly, throughout Kentucky, Tennessee, and North Carolina. Consequently, it often occurs in some portions of these States, that districts elevated a few hundred feet above the rivers, where alluvial deposits could not be made, are furnished with such a scant supply of earthy materials as to unfit them for the plow. The limestone, being the least destructible, usually occupies such districts and has not, in all time, fully covered itself with soil. But it is not the low lands only that are rendered almost worthless by a pavement of indestructible rocks. Sometimes the mountains, left standing when the valleys were excavated in the horizontal strata, have belts of massive limestone or solid sandstone, or both, encircling their sides or crowning their summits; while all the strata beneath are composed of softer shales and slates, which, decomposing readily, are washed away by the rains to cover the slopes with soil and sub-soil. But while this process gives a loose, porous, productive soil to mountain sides, it, at the same time, undermines the massive rocks above, where they exist, and allows them to break loose, from time to time, and tumble down so as to cover the surface and unfit it, often, for either cultivation or pasturage. When the strata are horizontal, entire mountains may thus have all their sides rendered comparatively worthless; but where the strata are tilted edgewise, the falling rocks are usually limited to a range corresponding with the thickness of the belts of rock from

which they are derived. In the absence of such indestructible strata, however, and where the schists and slates alone prevail, whether they are horizontal or vertical, no ranges of massive rocks forbidding the growth of vegetation, can accumulate upon the mountain sides, excepting where the strata are highly indurated and the grounds precipitous.

We are now prepared to consider the soils and sub-soils of Cherokee county. As before intimated, the schists and slates greatly predominate in this county, and nearly all its territory is covered with soils of more or less fertility. I was enabled to examine this question successfully, by passing along the turnpike roads which have been recently constructed across the mountains. These roads are made by winding around the mountain slopes, and terracing the track to a sufficient width to allow of the passage of wagons. In the cutting and filling necessary to complete this work, the soil and sub-soil are exposed, often, to a depth of from one or two to six or eight feet, and sometimes to more than ten. By this means it is found that the rock very seldom approaches nearer the surface than from one to ten feet; that is to say, the soil and sub-soil, including small fragments of the slates, and into which the roots of trees and plants can penetrate freely, has a depth of from one to ten feet. But it is often more than this, as can be seen in other places, and even twenty feet of decomposed rock, derived from the wearing away of the strata above, will be found to prevail to a great extent. The turnpikes cross the mountains at depressions usually having an elevation above the valleys of about 2,000 feet. The exposure of the soils is thus rendered complete.

One thing of much importance must be noted there. Any one, in passing over these mountains, will find the most perfect system of drainage imaginable. The whole country may be said to be *tile-drained*—the tile being represented by the slate rocks, and set upon edge so closely as to support the overlying soils, but yet not so compact as to prevent the rains from filtering downwards far below the roots of vines and fruit trees. It is this condition of the soils, together with the roots of trees, plants, and grasses, which it sustains, that prevents the mountain lands from being washed into gullies and impoverished by the loss of the surface mould. When the lands are cultivated a few years by the plow, their natural porosity is diminished, and the under-drainage destroyed. The roots soon decay and no longer sustain the soils, and consequently they are liable to wear out by washing rains and become greatly reduced in value. It is for this reason that the mountain lands should be sown in grasses, for pasturage, or cultivated in grapes and fruits, so as to preserve their virgin soil. By this means their fertility may be preserved for hundred of years.

[Concluded next week.]

GREELY ON THE PACIFIC RAILWAY QUESTION.

Horace Greely, in a speech in San Francisco, on the subject of a railway to the Pacific, remarked:

"The building of the road would cause a great increase of the receipts of the Federal Government from the public lands, customs, and post office; and if \$50,000,000 were paid out from the national treasury, gradually, with the progress of the work, there would be as much cash on hand at the end of the work as if the \$50,000,000 had not been given away.—The railroad would have been built at nominal cost of fifty millions, but at a real cost of no millions at all."

PACIFIC RAILROAD MEETING AT SAN FRANCISCO.

SPEECH OF HORACE GREELY.

We copy from the San Francisco *Bulletin* the speech of Hon. HORACE GREELY on the Pacific Railroad, at a meeting held on the 17th August, in that city. The meeting was organized in front of the Oriental Hotel, and the papers state that at least five thousand persons were present. Mr. Greely spoke in substance as follows:

FELLOW CITIZENS:—My voice is not strong enough to reach half the audience from that elevation [pointing to the balcony], which would throw it over you all. But if you will be silent, I will endeavor to speak deliberately and clearly, and hope to enable you all to hear. The Pacific Railroad is the grandest and gravest question of the age. We must not undervalue its difficulties. It is not to be secured by the adoption of light resolutions; it can not be built by demonstrations and public talk; it requires the earnest, persistent, and unchangeable effort of a great people. I may call it the product of two necessities: First, a political necessity, in the light in which it is to be regarded as concerning our government; and, second, as a commercial and social necessity; and I shall speak of it this evening with reference to both.

Many men, when they think and speak of the Pacific Railroad, are apt to regard it only in a pecuniary point of view. Will it pay? they ask. What is the effect it is going to have as a source of pecuniary profit? Such is the way in which they look at the subject. But I protest against this view. I do not look at it as a matter of pecuniary profit at all. It has claims of another and stronger character upon the attention of the Government and people. When the New York and Erie Canal was about to be commenced, and discussion was going on in regard to it, there was much more said to ridicule and discourage it than there is now in regard to this railroad. The canal was regarded generally as less practicable than we regard this work to-day. But even then the question with the public mind was not whether it would pay, but could the State of New York do without it. The State answered that it could not do without it, and the canal was built. Now look at the result. Before that time the cost of the transportation of necessary articles from the seaboard, required for the indispensable necessities of Government, exceeded by far the whole amount the canal cost when they came to build it. Had the Erie Canal been completed on the 1st January, 1812, it would have saved the Government in the war with Great Britain which followed—in the cost of transporting men, provisions and munitions of war—more than the entire cost of constructing the work.

Now, I ask, is the Pacific Railroad a Governmental necessity? I insist that it is. First, as a means of national security, it is the duty of Government not only to resist and avert danger when it impends, but to foresee and prevent it as much as possible before it breaks upon us. To-day the United States has two separate defenses to make. The defense of the Pacific coast must be, in the nature of circumstances, entirely distinct from the defense of the Atlantic coast. The force here must be sufficient to resist any force brought against us in this part of our country. The army upon the Atlantic coast can be of

no service to defend the Pacific coast; nor can soldiers from here defend the Eastern seaboard, if needed. To protect ourselves we must have two armies—double what almost any foreign State would require in attacking us. Our protective forces would have to be divided and distinct. If war were to break out to-morrow, as it may at any time in the present complicated position of political affairs—as, for instance, in regard to Cuba—we would be compelled to defend these two distant coasts at the same time. Why, you all know that England and France are pledged to the support of Spain in her possession of Cuba; and you can imagine what the result would be, if we should come into collision upon that question. We may, indeed, expect, with a great deal of certainty, that war will actually break out in reference to Cuba within the next ten years; and we must be ready to meet it. We are building forts and arsenals in various parts of the country, and endeavoring to fortify ourselves against what may come; but every day renders such defenses as these more and more useless. The science of war is changing all the time, and making the power of a nation depend upon other things than its forts and fortifications. We have need of brave men, and we require them in the proper place at the right time. You have all read what the French Emperor said in his address to his soldiers as he was about entering upon a great war; he told them that the great reliable effective force of the army was in the bayonet. But there must be men to wield these bayonets. We may also say, in similar words, that in the number of our bayonets is our strength. In the event of being attacked here, we have two selvages of territory to defend; they are widely separated—one far in the East, upon the Atlantic border, and one here; and in our defense, as I said before, we have to do double work against our enemies—we must stand two to one to protect ourselves. Any nation with whom we may be at enmity, may send an armament of vessels—say of screw-propellers—and they could reach here, and lay your city in ashes, and make your country desolate with smoking ruins, long before you could be reached by any effective body of men who should leave the Missouri for California on the same day on which the hostile fleet sails from the ports of England or France. In order to protect ourselves, and be able, in the event of contingencies—which are possible, and, perhaps, probable—we need the means of transportation. Give us a good railroad, and the men who are employed in the defense of New York, to-day, can be brought to defend San Francisco next week, if there should be a necessity for it. [Great cheers.] If this means of communication, and speedy communication, be established, we shall not require two armies—the same men may defend us there and here. We shall then have but one line of defense, and need but one army. We are now yearly spending millions for fortifications; but the Pacific Railroad, with the advantages of speedy transportation, will be of more utility than all the forts. It will be our best defense, both on the sea coasts, and at any required point in the vast interior.

On the ground of public economy, the road will be a good thing. We are now paying, annually, \$5,000,000 for the transportation of troops, provisions, and other supplies from the westerly settlements of the old States into the Indian country of the interior. We have to support our army in Utah Territory, and the supplies which have to be forwarded to them across the plains, cost five times more than they are worth in the places from which they

are carried, on account of the expense of transportation. The most necessary articles of consumption have to be paid for at five times the ordinary rates, pound for pound. And this must go on year after year, so long as there is a savage tribe in the country, and we have no Pacific Railroad. But this is not all. These troops, in the exigencies of the service, may have to be pushed further over the deserts and wilds of that country; it may be necessary for them to go down and keep the Mohave Indians in check, or they may have to penetrate to the Pawnee country; and here would be additional transportation at costly rates. If the railroad were built, then men and their arms and munitions would be transported at less than half the price we now must pay. I therefore repeat it, that on the ground of economy the railroad is a good thing, and ought to be built. You remember how the national heart trembled, two years ago, for the safety of our little army in Utah, when it was hemmed up in the Wahsatch mountains, blockaded by snows, its provisions cut off and destroyed by a Mormon force, and dependent for subsistence upon their starving oxen. They had been sent out their against the Mormons, then supposed to be in a state of rebellion; and we feared the worst for them in the unfortunate circumstances surrounding them. The country then would have expended millions to be sure of their safety; but the millions were valueless because the army could not be reached across the masses of snow. Now, if we had had the railroad, they would not have had to encounter these difficulties; they could have been in Salt Lake Valley long before that time, and have settled the whole difficulty, and accomplished the object of their march six months before the day on which they reached their destination.

Look, again, at the mails, and see how they are carried now. We have four separate mail routes between this coast and the Atlantic border; and another from St. Paul, Minnesota, to Puget Sound, has been ordered by Congress. These several routes cost over \$1,000,000 annually, and require nearly a month for the journey. It is hardly necessary to say that these mails are requisite for the purposes of commerce between our people East and West, as well as for other purposes. They must be carried; but if we had the railroad, all of them, passing from seaboard to seaboard, would be transported in ten days from New York to San Francisco and at less expense. You might have a daily mail then, whereas you now have it only semi-occasionally. You do not, with your present arrangements, get all that you should. You get no newspapers by the semi-weekly arrangement, which you ought to get. Newspapers are what you also want, and the fact that you do not get them inflicts great injury upon my trade, and I feel it myself. [Laughter and great applause.] It cripples the newspaper trade as well as others. For all these reasons, I said that the railroad is a necessity; and, view it in any light we may choose, there is every reason in favor of it, and by all means it should and ought to be made. [Applause.]

As a matter of commerce the railroad ought to be built. Look at the channels of commerce as they exist now between the extremes of our country. There are two oceans to cross; it requires, at least, thirty days to make the trip; and we risk the dangers of the deep as well as the dangers that may at any time arise from the hostility of other nations. In case of war, this commerce would be impossible; our trade in the ordinary channels and our shipments of treasure, upon which so much of the stability and business of our mercantile

community depend, would be arrested. The commerce, with its transits, exists now only by sufferance—by the sufferance of a foreign State, whose territory we cross from one ocean to the other—and it may be broken up at any time. We want to have this trade secure; we want to be certain about it, and not depend thus upon others.

Then comes the immense trade of immigration. I have passed through the flood of emigrants on the Plains this year. I have seen 30,000 people and 100,000 cattle on their weary way hither; and have beheld their way-worn, tiresome labors, in their long and suffering march. If there had been a Pacific Railroad, all these might have been here in May. With that facility, it would not have required over fifteen days, with the slowest travel, to transport them all, with all their necessities, and without the exposure and sufferings they have to bear. It will take them now an average of four months to get here; they will arrive at the verge of Winter, worn out, weary, foot-sore, and reduced by their struggles. Had they been able to cross the continent in ten days, they would have arrived here healthy, hearty, strong, vigorous, and ready to go at once to work; and before Autumn, they would have been able to earn more than enough to have paid the expense of the trip, while they would have been spared all the anxieties of the severe and painful journey. I have seen women and children plodding slowly along in the hot plain, tanned and sun-burnt, working their way through long stretches of greasewood and sagebrush, weary and sad; and I thought, as I looked at them, with how much sorrow and regret they must recur to what they had left behind; and my heart bled to think how far was the distance; and how great the interval of time which separated them from the land of their aspirations. I thought not of them only; but of the great armament which is following their wake across the plains, coming to assist you, to aid in enriching your valleys, and developing the resources of your country. It may be some time before they arrive; but when they come pouring down over your Sierras, I hope you will receive them with the right feeling. I hope the sight of that army will quicken you, will arouse the torpid, fire the lukewarm, and spur up the faithless. I hope it will impel you all to renewed energy—that you will rise up unitedly, like one man, and cry out that the railroad must be made, and made soon.

But, ladies and gentlemen, this army of emigrants is but the advance guard of the many that will and must come—that would have come *this year*, had there been a railroad. [Applause.] The people of the East—that is, the Caucasian race—seem to be impelled westward by some irresistible law of gravitation, the impulse whereof is hidden in the purposes of Providence. They turn their faces westward; they look forward upon the homes offered them in California and Oregon; upon these countries are fixed the eyes of hundreds of thousands in the old States and in Europe. A short time before I left the East, I met and entered into conversation with a very intelligent English gentleman, upward of seventy years of age, who had traveled much, and had once been in California. He told me that he had been to visit his early home, and now he intended to return here, and spend the rest of his days in California; for it possessed the finest climate in the world [Applause.] What returned Californian, as we call them, at the East, does not wish to get back again? I met at the last printing office in Kansas, before I entered upon the

plains, a person engaged in editing a paper, who had previously been in California. He told me a great deal about the country, how much he liked it, and declared that it was the only land to live in. I asked him why, then, he was found any where else? He replied: "Because I am an infernal fool!" [Laughter and applause.] This is the way they all talk. Thousands who have made their "pile" here, and then went to the East, if we get the railroad, will return to you, and bring their families along with them. [Applause.]

I will not dilate upon the subject of the Oriental trade, which, it is anticipated, would be attracted to this channel, if we had the road. Wiser men than I, who have examined the question, say that San Francisco is in the natural path of this commerce, and that the silks and spices of India and China should pass here. If the railroad were built, they think that the present business arrangement of the world would be changed, and that New York would be the commercial center and not London. [Cheers.] But I do not now look abroad for arguments; for I find them abundant at home, in our own necessities. The road is indispensable, as I have shown. The next question is, how is it to be made. This is the practical part of the matter. We must build the road for the whole country. Let us then banish all questions in relation to particular routes. I thank God that I live in a city large enough, and spirited enough, to realize that all the railroads in the United States run into New York. [Laughter and applause.] If they do not exactly run into it, they are so connected with others which do, that they get there at last; or, if they do not run there, they run somewhere else, which accommodates the people, and that is a satisfaction. [Cheers.] It makes no difference where the road comes to on the Pacific, so long as we get it. It may run to the mouth of the Columbia River in Oregon, or to Puget Sound, or to San Diego; it will be pretty much the same in the end, so far as the question of terminus is concerned. You will get the benefit of it. If it comes to San Diego or any place else, you will run a branch to meet it, and will get all the trade that naturally belongs to you. What ought to pass through San Francisco will pass through it; trade will be sure to take its proper channel. If the road comes to San Antonio, on our side, we will manage to connect with it in some way, and get our share of its advantages. I say, then, banish all questions of place, and determine that the road must be built somewhere at once.

Let the Government aid the work. I do not mean that the Government should build it, for private enterprise and commercial sagacity will construct it at far less cost than the Government can. Let the Government say the road shall be built; we can find plenty to do the work. Let them say to all the world: "We want this work constructed, and are willing to aid in its completion. When done, we shall desire to transport our troops, supplies, mails, and munitions of war, over it, and we want to have the exclusive right to use it for such purposes whenever an emergency requiring it shall arise. Now, we can afford to pay for these privileges and this service, and we invite bids from you all. Take a year to make your surveys, or two years if you need it, and then let us have your bids, and we will award the work to whoever will engage to do it the best and quickest, and for the least amount of compensation for the services we shall require."

In this way the Government can secure the railroad, and insure us the carriage of full

daily mails each way—not partial mails, as now. We might then, in time of war, have men transported within ten days, or perhaps in five days; for some would already be in the Indian country between here and the Atlantic. Thus we should be doubly strong, and ready for any emergency. If such proposals as I have suggested were made, I believe we should have plenty of bids, and that we should not have to pay a bonus of more than \$50,000,000—may be not more than \$30,000,000. But it must be recollected this bonus would not be lost. The building of the road would cause a great increase of the receipts of the Federal Government, from Public Lands, from Customs, and from the Post Office. The road would open an immense extent of country, rich in mines of iron and copper, as well as of precious metals, of no use till some such means of communication be opened up, by which their products can reach a market. The road would electrify the whole line of the route; it would increase the Post Office receipts and Land Office receipts, and I believe that in less than fifty years the whole amount would be returned into the Treasury by itself. The road would need public aid for its construction to the amount of say \$50,000,000, but it would really be built at no cost to the Government at all. The result would be profitable to Government. We should not have to pay all the bonus at once, but only as the work progressed, and as the increased receipts would be coming in; in the mean time, we should have as much money in the Treasury at the end of the work as when it began.

But I can not speak longer. I am not able; for my voice will not sustain itself. You, citizens of California, have a direct, palpable, controlling interest in the construction of this work; and we, who live at a distance, in the Atlantic States, sympathize with you. But your energy must strengthen the irresolution of the weak and faint-hearted. You must work, and agitate, and insist that the road *shall* be built. There are still those who think us crack-brained enthusiasts, when we speak thus. When we were about to commence the New York and Erie Canal, De Witt Clinton, wrote to Thomas Jefferson, stating what he was doing. Jefferson wrote back that the idea of such a canal was magnificent; but that Clinton was fifty years ahead of the age. When the work was completed, Clinton wrote to Jefferson again, stating that the work was done. Jefferson had made a mistake; but he was a frank man and wrote back to Clinton, "You were right, and instead of your being ahead of the age; I was fifty years behind the age." [Applause.] So it is with these men who oppose the Pacific Railroad. They are behind the age.

Some say the road will build itself in time—perhaps, it will; but you will wait a long time before that day. Those treeless hills, and sandy wastes, and alkaline plains—it will cost much money to pass them. The youngest man here will be in his grave before the road will build itself; and we want it *now*. It is cheaper to build it than to wait for it. You must be energetic, resolute, determined, if you would get it. You must write home to your friends—and I hope that all will write—and let them know that you must have the road, and that you will have it. Make its enemies your enemies. You are many of you Western men; it was such men who built the Erie Canal, and it is such men who will build this road. Make its enemies your enemies, and its friends yours. Be active in this matter—be strong. I beseech that you will let your voices be heard. Take hold of it with spirit.

It is a great and glorious enterprise, worthy of this people and of this magnificent country. As for me, I will lift up my voice for it as long as I live; and I hope, in ten years, if I live so long, to come and see you again, over the railroad in ten days' time from New York to San Francisco. [Applause.]

With his last word, Mr. Greeley turned to descend the table upon which he had been standing, while the crowd cheered and hurrahed to the extent of their lungs. He had spoken for very nearly an hour, in a remarkably clear, correct, and agreeable tone of voice. In many parts of his discourse, and particularly toward the close, he was eloquent, and made the most happy impression upon the audience. Indeed, he exceeded the anticipations of those who were well acquainted with his abilities as a public speaker.

After he had withdrawn, John V. Wattson was introduced, who made some brief remarks upon the present necessity of the railroad. F. A. Woodworth then offered the following resolutions, which were unanimously adopted:—

Resolved, That the immediate construction, under the auspices of the Federal Government, of a Railroad, to unite the States of the Atlantic with the Pacific coast, is a measure of vital necessity, as a means of facilitating popular intercourse, transporting troops in time of war, developing commerce, opening to settlement vast sections of the public domain, now beyond the bounds of civilization, and binding the Union more firmly together.

Resolved, That the peculiar circumstances surrounding the case take the Pacific Railroad out of the ordinary category of "Internal Improvements," in regard to the policy of promoting which, by aid of the General Government, there may be honest differences of opinion amongst the people.

Resolved, That the people of California, without distinction of party, deprecate the spirit of sectionalism, which has hitherto proved so serious an obstacle to legislation in favor of this great national enterprise; and that we respectfully, but firmly, demand of Congress the immediate passage of a bill, at their next session, providing for its actual commencement forthwith, and leaving the route to be selected by the private capitalists who—under proper guards and restrictions, and with the necessary Governmental aid—embark their fortunes in the undertaking.

Resolved, That regardless of all professions, we henceforth hold every earnest and practical advocate of the Pacific Railroad to be our friend, and all its opponents or obstructors, the enemies of California.

The meeting then adjourned and the crowd dispersed, every body seeming well pleased that the railroad meeting had been a marked success, and satisfied that it will result in great good to the people of California and to the whole United States.

WILLIAMSPORT AND ELMIRA RAILROAD.

A meeting of the chattel mortgage bondholders of this road was held in Philadelphia, on the 21st ult., to hear the report of a committee appointed at a previous meeting; from the *Inquirer* we copy the report:

To the Holders of the Bonds of the Williamsport and Elmira Railroad Company, secured by the Chattel and Third Mortgage.

The committee appointed at the meeting of chattel bondholders, held Sept. 2, 1859, would respectfully report:

As soon as we ascertained the condition of the Company, and the position occupied by the holders of the chattel bonds, we saw the importance of inducing the managers of the Company to save us from useless sacrifice, by putting us in possession of our property. We considered that we had strong equitable claims upon them, and determined to urge them on the Board without delay.

The security for our bonds consists of two mortgages—one a third mortgage upon the road, which we consider of little if any value,

as at the time of its execution the road was subject to two mortgages, amounting to \$1,700,000, and on these the arrears of interest are considerable; the other mortgage, intended for our security, is upon the rolling stock of the road, which, at the time the mortgage was executed, consisted of—

- 16 Locomotives and tenders,
- 8 Passenger Cars,
- 3 Baggage Cars,
- 39 House Cars,
- 61 Platform Cars,
- 725 4-wheel Coal Cars,
- 23 8-wheel Coal Cars,
- 7 Caboose Cars.

These, we are informed, cost \$380,000, and they are said to be in good order.

A stipulation of the chattel mortgage provides that as the company acquired other personal property and rolling stock, the same should be set apart for the security of the bondholders, until such new rolling stock, together with that described in the mortgage, should "actually, and in good faith, have cost the sum of five hundred thousand dollars." No new stock has been acquired, and the security of the bondholders has not been increased, as was contemplated when the mortgage was executed.

By the provisions of the mortgage, upon default being made by the Company in the payment of any coupon attached to the bonds, the Trustees named in the mortgage have the right to proceed to take possession of the chattels for the benefit of the bondholders. Default was made on the coupons due October 1, 1858, and May 10, 1859. The bondholders, at the solicitation of the managers of the Company, and under an assurance that the difficulties which prevented prompt payment was only temporary, surrendered the coupons under a special trust, and took in lieu thereof, what is known as "Chattel Mortgage Scrip," due May 1, 1857, thus healing the default and surrendering their right, at that time, to require a compliance with the terms of the mortgage. We thus placed ourselves in a position to be delayed in having the trustees take possession of the chattels, until the 1st of June, 1860.

As we learned, soon after our appointment, that many of the creditors of the road were pressing their claims by adverse process, and as it was intimated by those representing interests different from ours, that some of the holders of the bonds secured by the first and second mortgages on the road, were threatening to raise the question of the right of the road to execute a valid chattel mortgage, we considered it important to have them placed in such a position *at once* that they would suffer the least possible diminution in value pending any proceeding that might be attempted. It is true, the mortgage was executed under a special Act of Assembly, (P. L. 1856, p. 198,) whose terms are clear and explicit; and eminent counsel have given the opinion in the most unqualified terms, that our claim on the chattels has priority over either execution creditors, or the Trustees of either the first or second mortgages, yet as our property is of a perishable character, we were desirous that it should not be subjected to the loss and embarrassment usually attendant upon the settlement of legal questions.

To accomplish this, we waited upon the managers of the roads, and urged the above considerations upon them. They admitted the equitable character of our claim, and said they had, by formal resolution, authorized the President of the road to surrender the chattels to the Trustees named in the mortgage, when-

ever such a course was necessary to protect the interests of the Chattel Bondholders.— They at the same time expressed the hope that some arrangement would be made by the other interests, whereby the use of the chattels would be required on the road, and as the surrender to the Trustees would involve a sale of the chattels, this use might thus be lost to the parties in possession of the road. They declined any further action in the matter, until it was necessary to protect our interests. We assented to the justice of this position, and believing that the present use of the chattels by the parties who might take possession of the road, and their future sale to any new organization, would be the most judicious course for the bondholders, we expressed our willingness to assent to any plan which would secure to our Trustees or our representative the possession of the chattels so as to avoid loss and litigation.

On this basis we took part in the subsequent negotiations, which were unsuccessful for reasons beyond the control of your Committee.— As the negotiations were likely to fail, and as many of the creditors of the road were pressing their claims, which will ripen into judgments on the 24th inst., it was deemed prudent by those having control of the road, to prevent it from being torn to pieces, by a timely application to the Supreme Court for such relief as the law allows in such cases. At the instance of a creditor who holds a portion of each separate class of debts due by the company, the Court on Saturday last, made an order, which we are advised will prevent useless sacrifice of the interests of any one. Under this order, and by appointment from the Supreme Court, Charles Macalester, Esq., after having given bond, with surety in the sum of \$30,000, has taken possession of the road, its property and franchises, to hold the same for the protection of the rights and interests of all parties. He has already sent proper agents to have the chattels properly marked and designated, so that they may be protected from levy and sale under execution. The arrears due for wages and labor are to be paid from the receipts of the road, and after the necessary expenditures to keep the property, real and personal, in good order and repair, the surplus will be retained until, by order of Court, an equitable division is made. Within sixty days he will file an inventory of all property which has come into his possession, and render to Court a monthly account of receipts and expenditures.

By this arrangement we believe that the waste of property and the sacrifice of interests which would have been inevitable without some such provision will be prevented. Time can thus be gained for amicable arrangement, while the legal rights of all will be undisturbed. Had your committee been called upon to designate a person to whom we would entrust the care of our chattels, until we can proceed under our mortgage, they could have named no one more acceptable than the present receiver.

In conclusion, your committee would recommend that the bondholders continue to unite in the protection of their interests, and that the present committee be continued, with authority to call a meeting of the bondholders whenever it may be necessary to take definite action, either in negotiations that may be proposed, or in legal proceedings that may be requisite to protect our interests.

JOSEPH HARRISON,

Chairman of Committee of Chattel Mortgage Bondholders.

Some conversational debate ensued, after

which the report was adopted. Mr. Cooke explained why Mr. Macalester had been appointed as receiver. This step had been taken to protect equally the interests of all the stockholders. The property passes into the hands of the receiver, and in case either the first mortgage bondholders or any of the other bondholders wish to seize the road, they will be forced to come into court and show their claim to the property. This will bring before the court all the different claims upon the road, and enable that authority to decide its ownership on equitable terms.

It was also stated that no action of a majority of the bondholders would bind them all.—Every man owning a single bond has a right to sue upon it at any time.

On motion, the Chair was directed to appoint an Executive Committee of three, to take general charge of the interests of the Second Mortgage Bondholders for the present.

A Committee of three was also agreed to, to ascertain the views of the First Mortgage Bondholders.

The Chair, assisted by Mr. Cooke, will select and announce both these Committees. The meeting then adjourned.

The Second Mortgage Bondholders assembled in Room No. 30. The Committee reported that they have been entirely unable to reach any compromise with the First Mortgage Bondholders' Committee, and also that they have ascertained that the road and all its interests have been placed in the hands of a Receiver—there to await, intact, the decisions of the law, as to the right of the various parties in interest. They have not objected to this course as the near approach of the day upon which judgments could be obtained, (the 24th inst.,) and the possession of the road obtained, made it imperative on the part of the lower interests to place the road and its appurtenances in some safe position.

The committee would have preferred a longer time wherein to endeavor to negotiate; but as this was, in the nature of things, quite impossible, they feel that the best has been done for the interests of the mortgage bondholders. There will now be time wherein to negotiate or litigate as they deem best. They asked to be discharged from further consideration of the subject, recommending that the Second Mortgage Bondholders take active measures at once, to engage counsel, and otherwise to unite in the protection of their interests. Accepted.

It was then resolved that the meeting consider any foreclosure of mortgages to be uncalled for, and that the interest of all parties will be better secured by an amicable arrangement, similar to the one set forth by the President of the Williamsport and Elmira Railroad Company, over his signature of August 23, 1859.

The treasurer appointed to receive money to engage legal advice, stated that a few persons had tendered him the amount required, but he merely took their names in view of recommending an adjustment of matters without a legal contest.

Different suggestions of bringing the road to a cash basis, and of dividing certain amounts, and also preferred stock, if a satisfactory result could be obtained. It was recommended that some such arrangement should be made.

A Committee of three was appointed to wait upon the Committee of the First Mortgage Bondholders, and obtain a knowledge of their views of an amicable settlement under their

signatures. They will be selected by the chairman.

Also an Executive Committee of three to represent interests of the Second Mortgage Bondholders. The Chair will appoint.

They then adjourned, to re-assemble at the call of the Committee.

From the Pennsylvania Inquirer.

IRON AND IRON WORKS ON THE LEHIGH.

ALLENTOWN, Sept. 20, 1859.

A short visit to this the head-quarters of the Lehigh Iron region has gratified me much, and I can not forbear a short sketch for the benefit of such of the readers of the *Inquirer* as have never been here. It may not be generally known that the Lehigh region ranks first among the various iron producing districts of the United States. In quantity and quality her iron stands preëminent. It was here that the first successful beginning was made in the United States of making anthracite iron. The *Great Eastern* does not tower above her diminutive kin and craft to a greater degree than do the magnificent furnaces of the Crane or Thomas Iron Companies above the smaller charcoal iron works. No one should ever visit the Lehigh Valley, without paying them a visit. It will amply repay the time.

First on the list of these, stands the Crane Works, situated at Catasauqua, three miles above Allentown. They consist of five large furnaces. They were commenced in 1839, with a capital of \$100,000. This has now been increased at different times to \$500,000, and all out of their surplus earnings, after paying their regular dividends. The amount of iron made is nearly 40,000 tons per annum, and using not far from 100,000 tons of ore. All these furnaces are in blast, and making from to their utmost capacity. Catasauqua, where the works are situated, was a farm when the site of these works was purchased. It is now a fine town of two thousand inhabitants, with several churches, stores, etc., and a bank. These works have done more for the benefit of Lehigh county than any other enterprise within her borders.

Two miles below these works are those of the Allentown Iron Company. These are very beautifully situated, just outside the borough limits of Allentown. These have four large furnaces, of which the three largest are in operation and making about 24,000 tons of iron per annum. The fourth is kept in reserve in case one of the others should have to be blown out. The quantity of ore consumed is about 55,000 tons. These works were commenced in 1846, when two of the furnaces were built. The remaining two were built subsequently. The iron made here is universally esteemed as of a very high character.

One mile above the Crane Works are the Thomas Iron Works. These consist of two large furnaces, equal in size to any in the world. They were built in 1853 and 1854. They make about 25,000 tons per annum, and consume about 60,000 tons of ore. This company contemplates the erection of another furnace next spring, and a commencement at the foundation will be made this fall. This is one of the most magnificent establishments in the country or even in the world.

One mile above these works are the Lehigh Valley Iron Company's works. They have one furnace, and are about to erect another of very large size.

Some distance above these are the Carbon Iron Works, at Parryville, Carbon county. These are making very extensive improvements, and will soon be in blast again. Besides these anthracite works, there are several charcoal works a short distance from the Lehigh, some of which are also in blast.

A movement has also been lately made to organize another company to build additional works, but nothing has yet been done to select a site; and here lies the difficulty, some desiring it at Allentown, and some wishing it located on the Ironton Railroad, near the North Whitehall Iron Mines, and about four miles from the Lehigh. The amount of ore consumed by these furnaces can not be much, if any, less 225,000 tons per annum. Of coal there is about the same quantity, and of limestone about 110,000 or 115,000 tons, and this is a business increasing largely every year.

About one-third of a mile above the Lehigh Valley Iron Works, commences the Ironton Railroad, now in course of construction. It runs from the North Whitehall Iron Mines to the Lehigh Valley Railroad, with which it joins at the point above mentioned. It will be only about five or six miles long. Nothing better indicates the very great undeveloped wealth, the inner wealth and resources of even the oldest districts of our iron producing regions, than the building of this road, and the progress of the mining section which it permeates. Ironton is a newly laid out place, and around this point lie these iron mines. Six or seven years ago the total yield of these mines was not more than 12,000 or 15,000—during the coming year it will reach 60,000 tons. Should it continue to increase anything like the same rate for the next five years, it will reach nearly or quite 100,000 tons per annum, for a space not exceeding a square mile in extent. Until now all this ore had to be carted the five miles in wagons, at a cost of eighty cents to one dollar per ton. During last winter the Legislature granted a very liberal charter, and the work is now being prosecuted vigorously, and by January next the cars will be placed on the road. It will thus commence with a tonnage of sixty or seventy thousand, with a steady increase thereafter.

In one other point this road is deserving of attention. It will add another signal proof of the feasibility of *short railroads* being made highly remunerative to their owners, and beneficial to all those near them. This is a local road for local business, and built by those along the line. Let us see how it is being carried out. The rates of charges prescribed by our general railroad law acts as an effectual extinguisher upon all short railroad enterprises. Three cents per ton per mile will pay on a long road, having a large miscellaneous freight and a good passenger business. It will not pay on any of our short roads, and we have only the choice of building roads to carry freight at that rate, or to continue the use of wagons at 15 to 25 cents per ton per mile. Our Railroad Law provides no intermediate rate of charges; five, eight, and ten cents ought certainly to be allowed for short distances. In the case of the Ironton Road, the rates are limited on farming produce, and unlimited on all other articles, such as iron ore, coal and limestone. Under this charter the road is being built and it will pay all parties. The present average rate of getting this ore to market is 80 cents; the Ironton Road will carry it for 60 cents; this will be a saving to the miners of 20 cents per ton, equal to \$12,000 per annum. It adds this much to the wealth of the mines. The

total expense to the railroad of getting this to market will not exceed 15 or 20 cents per ton, thus leaving a clear profit to the railroad company of 40 cents per ton, equal to \$24,000 per annum, after payment of all expenses.

The road is being built in a very substantial manner, and what is to their credit, is intended to be laid with a first class American rail. The enterprise will be (to use a vulgarism) a good speculation for the owners; but who shall say that they do not richly deserve it? It will add another gem to the wealthiest inland county, in proportion to its size, in the State. I might trespass further in order to speak of the Catsauqua and Foglesville Railroad, another ore road, but I feel that I ought not. I will only add one item now. If any of your city readers wish to take a most delightful excursion, let them visit this region. During the second week in October the foliage will have put on its most gorgeous apparel. From Philadelphia to Bethlehem, thence to Allentown, thence to Mauch Chunk by carriage, and then over the renowned Switch Back Railroad, and down again by railroad, will form an excursion seldom equalled in this or any other country.

Yours,
M. L. T.

AVENUES OF TRADE.

The problem of railroad capacity to carry freight, as opposed to canals, is apparently solved in favor of the roads. The most determined opponents of railroads now yield the point, at least where the most favorable circumstances exist for it. The Reading Railroad is a very favorable example. The utter failure of that concern to carry coals, in opposition to the canals, was strongly urged by the most experienced engineers. In 1844, Charles Ellet, Esq., writing on behalf of the Schuylkill Canal, pledged his reputation that 1,000,000 tons rolling over any road, would inevitably disintegrate and destroy the iron. The Reading has delivered 40,000,000 tons over iron which still shows no sign of decay. That road has, however, advantages enjoyed by no other in the country, since its freight has a continuous descent to the market, and in defiance of all other possible routes it has supplied 40 per cent. of the consumption of fuel in New York, and will continue to be the cheapest route from the mines to tide-water. The New York Central Railroad is the next best situated road in the whole country; it has the longest thickly-settled route in the country. It draws its trade from a larger number of people and greater wealth than any other road. Nevertheless, this road, as well as the Reading, has been the victim of that scandalous stock-jobbing management which has, and will ruin all confidence in corporate management. Owing to this, the road was too cheaply built in the first instance, an evil which has entailed ruinous expense for road-bed, and it has been furthermore subjected to that most outrageous swindle of adding \$9,000,000 of future earnings to present cost, for which all future purchasers must pay. Almost all other roads West are, sooner or later, to reach the condition of the Erie. They are the creatures of speculation, and must inevitably undergo reduction to the ruin of the stock interest. These roads have, nevertheless, been of the greatest service to trade, and to the wealth of the whole country. The Erie Railroad has probably added \$50,000,000 to the wealth of the State, and the operation of the Central Road has, no doubt, enhanced the taxable value of the State \$100,000,000, that is to say, the State levies tax on that amount more property

than it would have had to tax, if the road had not been in operation. In this view, the States, towns and counties derive \$500,000 per annum more revenue from existing assessments than they would have been enabled to do, had the road never operated. The effect of the Erie Road has been similar. The due consideration of this fact will demonstrate at once the enormous folly of the proposition to tax the freight on railroads. The point is, perhaps, more clear in the case of the Illinois Central Railroad. The Federal Government owned 30,000,000 acres of land in that State, that for more than 20 years it had vainly tried to sell. In the hands of the Federal Government, that land could not be taxed. The building of the Illinois Central brought the whole within the tax list of the State, and that State now draws \$1,000,000 per annum revenue from that land, yet it unjustly charges the road 7 per cent. tax on its gross revenue, which amounts to \$140,000 per annum. All the roads are built too cheaply, but at too great cost. This seems a paradox, but take the case of the New York Central. The road was built too cheaply, that is, its road-bed is a continual source of large expenditure. If half the \$9,000,000 "future earning bonus," out of which the stockholders have been swindled, had been spent originally upon the road-bed, it would have made a difference of \$500,000 in revenue to the present stockholders, because it would have saved expenditure for repairs and appropriation to sinking fund. As it is, the road can never more than keep itself good. A new loan every few years must supply the money paid in dividends, under pretence of earning it.—*Economist*.

ENLIGHTENED MERCHANTS.

Young men, who are about to enter upon a mercantile career should learn to appreciate the importance of liberal views and practical knowledge, even beyond the immediate concerns of business. It is a subject of frequent comment that even merchants make but a lamentable figure when they emerge from the store or warehouse, and are called upon to participate in assemblages of their fellow citizens, convened to discuss important enterprises, or to wield the pen in behalf of any particular cause. This should not be the case. These men have heavy interests at stake, and they are naturally looked to for counsel in many emergencies. If they show that they are unequal to the task, they lower themselves in public esteem, and make themselves amenable to the charge of being destitute of soul, beyond their boxes and bales. We have repeatedly attended meetings of the commercial class, called to consider the bearings of certain improvements upon the trade of the city, and witnessed with regret the introduction of lawyers and politicians to the rostrum, from which practical merchants alone should have delivered their views. The new generation of merchants should remedy this deficiency on the part of the elders of the counting house, and prepare themselves, by reading and social discussion, for taking an active part in public demonstrations when their services are needed. It is not necessary for them to become learned savans. Let them simply strive to acquire that kind of information which is likely to be of use in pushing forward enterprises of general utility, and to cultivate the power of setting forth the opinions they may form upon any question of public interest. The debates at the meetings of the Board of Trade are advantageous in this respect. But the discussions of that body would form a better school if they were more

generally participated in, and effort were made to give them a wider range. We look forward to the rise of a race of merchants who will not be content with loaning their names or their money for works of improvement, but will labor with voice and pen, and display a stock of varied and accurate information which will show them to be well-read and highly cultivated gentlemen.—*Economist*.

ON THE ECONOMICAL FORMATION OF STEAM.

At a meeting of the London Association of Foremen Engineers, held 2d July, 1859.—Mr. Joseph Newton, President, in the Chair, the paper read was "On the Economical Formation of Steam," by Mr. Stebber.

The author said, that in the effort made to economize fuel in the generation of steam, much attention had been bestowed on the extraction of heat from the gaseous products of combustion, and the transmission of that heat to the water; but we should not rest content with the general belief that the carbon or solid portion of the coal is the most valuable in practice, and that the hydrogen connected therewith, and which escapes therefrom in the furnace is of little value, on account of the difficulty of supplying it with just sufficient air for completing its combustion. Neither should we remain content with a merely general knowledge that a certain construction of furnace and a certain form of grate is best. We should also know *how* or *why* these facts are acknowledged. But, it may be said, is it possible to effect a yet further reduction of the present consumption of fuel for our best steam engines? Is any other man destined to be so happy as Watt, who, by the application of the condenser, saved 75 per cent. of fuel?

The application of the condenser, the author said, touches one of the vital principles of the application of steam. Watt showed great judgment in the designing of his wagon boiler, and its introduction was of much practical good. He obtained thereby a large amount of heating surface, and enclosed his boiler with a radiant heat conductor—fire brick. They were accordingly capable of evaporating 10.8 cubic feet of water, by means of a bushel or 83 lbs. weight of Newcastle coals—equivalent to 7½ lbs. of water evaporated by 1 lb. of coal. At present, 8 lbs. of water to 1 lb. of coal may be taken as the average of land boilers generally.

The economical formation of steam, it was further remarked, depended on perfect combustion and the absorbing and transmitting powers of the boiler. Combustion might in some cases be perfect, but the absorbing power imperfect; and evaporation in such case would bear a low proportion to the consumption of fuel. There were other important considerations to be maintained. The boiler, for example, must be made capable of containing such supplies of water and steam as should obviate inconvenient fluctuation in the water level, and thus to abate the risk of water being carried over with the steam into the engine. It must also be conveniently arranged for cleansing and repairing.

The paper throughout displayed a great amount of practical ability and knowledge of the subject on the part of the author. A brief discussion of the paper terminated the proceedings.—*Newton's London Journal of Arts, for August*.

Cars will commence running to-day on the Street Railroad, from Fourth and Vine to Seventh and Mound.

ANNUAL REPORT OF THE SANDUSKY, DAYTON AND CINCINNATI RAILROAD.

The annual meeting of the stockholders of this road will be held at Sandusky to-day, for the purpose of electing a Board of Directors.

The annual report has just been prepared and laid before the Board, from which we gather a synopsis of the business of the road for the year ending June 30, 1859. From this report it appears that the gross earnings for that period were as follows:

For passengers.....	\$173,387 82
For freight.....	271,147 34
For mails.....	16,065 00
For express, etc.....	14,027 75
For storage.....	3,331 21

Expenses for the year.....	\$577,958 53
Net earnings.....	352,066 01
	\$225,882 57

From the comparative statement of the Treasurer, it is seen that the net income of the past year exceeds that of the preceding year in the sum of \$83,910 37. Of this sum \$34,278 are to be credited to the gross earnings, and \$49,632 36 to decreased expenses.

THE OVER-DUE BONDS AND FLOATING DEBT OF THE ROAD.

Oran Fallett, Esq., the President, makes the following report in regard to the over-due bonds and floating debt of the road:

"The process of extinguishment of over-due bonds, amounting, at the close of the fiscal year 1858, to \$190,000, is progressing under the arrangements of 1856, satisfactory to all parties. Fifty-three thousand dollars of principal, and \$15,405 of interest, have been paid during the past year.

"Our floating debt is in a fair way of adjustment under the programme of February, 1858. Many of the company's securities, pledged as collateral, have been released and applied to the extinguishment of past due obligations. In some instances, where the margin in collaterals was large, obligations to pay a percentage in money have been given with the securities, on settlement. The securities thus used are mostly of the class of '76, and the obligations accompanying them have been promptly met. The remaining portion of our floating debt, including also that known as 'the boat debt,' it is hoped, will soon come in to the proposed arrangement, especially when it is seen, as will appear by the exhibits accompanying this report, that the company has offered the best terms within its power, and as such, in the end, promise to be entirely sufficient and satisfactory."

FUTURE PROSPECTS OF THE ROAD.

The President thus speaks of the future prospects of the road:

"In estimating the future prospects of this road, some regard should be paid to its past performances. Its net receipts, after allowing for changes in its operating condition, may be assumed as the most reliable guide in forming this estimate. From 1853 to 1859, both inclusive, the following statement shows the net of each year:

1853-54.....	\$34,441 20
1854-55.....	228,281 83
1855-56.....	246,620 62
1856-57.....	2,570 39
1857-58.....	141,672 21
1858-59.....	225,882 57

"These results were derived from the following gross receipts for the same year, to-wit:

1853-54.....	\$705,783 21
1854-55.....	588,777 79
1855-56.....	575,723 81
1856-57.....	686,190 96
1857-58.....	543,680 58
1858-59.....	577,958 58

"The net of the year just closed is the largest of the last three years, about equals (contrasting the gross and net of the two years) that of 1854-55—while the expenditure has fallen short 60 per cent. on \$600,000, which was the estimate in last year's report."—*Enquirer*, 29.

SOUTHERN PACIFIC RAILROAD.—The stockholders in this road, who reside hereabouts, will read the following paragraph, from the *Louisville Journal*, with interest:

"We saw a brief letter from Dr. Fowlkes, on Friday, in which, writing from Marshall, he said that J. Edgar Thompson would, within a very short time, be elected President of the road. Mr. Thompson will, unquestionably, be elected, and he made a formal promise several weeks ago that he would accept if those things should be done which have since been done. He will enter immediately upon a vigorous discharge of the duties of his new position, and it is a position for which he is known throughout the United States and Great Britain, to be as well qualified as any other man living, if not better. His experience and his success in the building of railroads are probably without a parallel. His command of means is unlimited. Under his auspices, the stock of the Southern Pacific must and will go to a high figure."

EAST PENNSYLVANIA R. R.—This work, recently completed and put in successful operation, forms the connecting link of 36 miles, between the New Jersey Central and the Pennsylvania Railways; thus making a direct line from New York to the principal cities of the West and South-west; bringing Cincinnati and St. Louis 187 miles, and Chicago 76 miles nearer New York than by the New York Central Route and Canada. The work has been constructed in a very durable manner; the masonry is of the first class, and no wooden bridges on the line. The cost, it is understood, has been about \$1,000,000. Capital stock, \$500,000. First mortgage bonds authorized \$600,000, on the entire road and its equipment.—*Am. Railway Review*.

OHIO IRON.—The iron interest in southern Ohio is growing up rapidly and extensively. There are forty-five furnaces in that part of the country, and seventeen in northern Kentucky, all having landings on the Ohio river to deliver for rail and river transportation. The yearly average produce of pig iron per furnace, may be estimated at 2,500 tons, and the value of all the iron produced is set down at \$4,650,000. There are 31,000 persons employed in these furnaces.

THE CHICAGO AND NORTHWESTERN RAILROAD.—The Watertown (Wis.) *Democrat* of last week says: All grading between this city and Janesville on the Chicago and Northwestern R. R. was finished last week, and everything is ready for the iron, which has already been laid over six miles south from this point. If there is no delay for the want of iron, it will not be more than three weeks before a locomotive will pass over the entire length of this splendid road, reaching from Chicago to Oshkosh.

BALTIMORE AND OHIO RAILROAD.—The following is the statement of the revenue of the road for the month of August:

MAIN STEM.	
Passengers.....	\$68,502 66
Mails.....	7,833 34
Express.....	3,929 97
Tonnage.....	246,914 97
	\$327,180 94

WASHINGTON BRANCH.	
Passengers.....	\$30,075 29
Mails.....	1,000 00
Express.....	1,350 00
Tonnage.....	6,144 44
	38,569 73

N. W. VIRGINIA BRANCH.	
Passengers.....	\$3,533 38
Mails.....	866 66
Tonnage.....	6,790 21
	11,190 25

Total.....\$376,940 92
Compared with August, 1858, the returns show the following result:

	Main Stem.	Wash'ton.	N.W. Va.	Total.
Aug. 1859.....	\$327,180 94	38,569 73	11,190 25	376,940 92
Aug. 1858.....	315,058 92	40,913 16	14,539 28	370,511 36
	\$12,122 02	2,343 43	3,340 03	6,429 56

Revenue of July, 1858, compared with Aug., 1859:			
Main Stem.	Passenger.	Tonnage.	Totals.
August, 1859.....	\$68,502 66	258,678 28	327,180 92
July, 1858.....	59,982 35	207,396 42	267,378 77
Increase.....	\$8,520 31	51,381 86	69,902 17

Washington Branch.			
Aug., 1858.	Aug., 1859.	Tonnage.	Totals.
August, 1859.....	\$30,075 29	8,494 44	38,569 73
July, 1859.....	26,467 80	6,472 42	32,940 22
Increase.....	\$3,607 49	2,022 02	5,629 51

F. W. Virginia.			
Aug., 1859.	Aug., 1859.	Tonnage.	Totals.
August, 1859.....	\$3,533 38	7,656 87	11,190 25
July, 1859.....	2,179 77	8,535 66	10,715 43

Passenger increase.....			
Tonnage decrease.....	Total increase.....	Total increase of passengers in August, 1859, over July.....	Total increase of tonnage on Main Stem and Washington Branch.....
\$1,353 61	\$878 69	\$13,481 41	\$53,403 88

Less decrease on tonnage on the North-Western Virginia Railroad.....			
			878 79

Total increase of tonnage over July.....			
	\$52,525 09		52,525 90
Total increase of revenue on the three roads.....			
	\$66,006 50		

The comparison of the earnings of the present with those of the last fiscal year, shows the following results:

	1858.	1857.
October.....	\$392,503 02	\$396,191 85
November.....	383,159 22	361,443 38
December.....	336,861 01	379,259 02
	1859.	1857.
January.....	327,176 63	217,518 73
February.....	321,391 10	277,035 49
March.....	410,061 21	439,256 23
April.....	369,067 33	482,518 45
May.....	397,959 33	397,770 07
June.....	359,029 01	400,730 00
July.....	310,934 42	358,604 65
August.....	376,940 92	370,511 36
	\$3,985,084 21	\$4,184,874 23

Decrease present year.....	
	199,791 02

The receipts of the Grand Trunk Railway of Canada for the week ending Sept. 10, were.....\$48,758 68
Week ending Sept. 11, 1858.....41,753 80

Increase.....	
	\$7,004 88
Total Traffic from July 1st.....	
	\$439,735 15
Same period last year.....	
	408,735 09

Increase.....	
	\$23,697 06

The earnings of the Ohio and Mississippi Railroad Company for August, 1859, were.....	
	\$106,777 23
August, 1858.....	
	146,297 99

Increase.....	
	\$20,479 24

The earnings of the Central Railroad Company of New Jersey, for the month of August, 1859, were.....	
	\$91,746 86
For August, 1858.....	
	77,845 30

Increase, 18 per cent.....	
	13,901 55

Executions has been issued in the case of Orlrich, of New York, against the City of Pittsburgh, on a judgment of the U. S. Court for the amount due upon the coupons from the bonds issued by the city of Pittsburgh and Steubenville and Charties Valley Railroad Companies, and certain stocks owned by the city levied upon.

MONETARY AND COMMERCIAL.

The same features of closeness in the Money Market noticed in our last, still continues without any material change. There is no serious difficulty for parties who are known to be above question, and who really have but little occasion to borrow, in their obtaining as much as they may ask for at regular rates, viz., 10@12 per cent. There is, perhaps, a little less offering outside than there was a week ago.

Exchange on the East on Saturday last advanced to $\frac{1}{2}$. The Bank of the Ohio Valley still, however, selling at $\frac{1}{2}$ to their depositors.

BUYING.	SELLING.
New York Sight..... 45@50 prem.	45@50 prem.
Boston..... 45@50 prem.	45@50 prem.
Philadelphia..... 50 prem.	50 prem.
Baltimore..... 45@50 prem.	45@50 prem.
New Orleans..... par.	par.
American Gold..... 35@37 prem.	50 prem.

Missouri money is bought at $\frac{1}{2}$ dis., and Wisconsin, Iowa, and Illinois at 2 dis.

The compact between the St. Louis Banks was broken up last week.

The condition of money matters in New York, will be seen by the following from the *Courier and Enquirer* of Tuesday:

The Bank Statement for the week shows a marked decline in the specie column, which will not be remedied by the receipts from California, as these latter are merely in transitu for Europe. The present report will probably lead to a small curtailment for the current week. The present aggregates are

In Loans, an increase of.....	\$20,000
In Specie, a decrease of.....	852,000
In Circulation, a decrease of.....	87,000
In Deposits, a decrease of.....	416,000

Two of the Banks report a specie reserve of 40 per cent. or more to deposits, eight report over 30 per cent., and thirty-one report over 20 per cent.

The Chemical Bank has declared the usual quarterly dividend of six per cent., payable Oct. 3d.

The semi-annual interest coupons on the Land Mortgage Bonds of the Hannibal and St. Joseph Railroad Company will be paid on and after the 1st proximo, on presentation at the Office of Duncan, Sherman & Co.

The Stock Market is quite firm at present quotations. Of New York Central shares the sales were at the First Board only seven thousand shares at 81 $\frac{1}{2}$ @82 $\frac{1}{2}$; of Chicago and Rock Island, 2700 shares at 68@69; of Missouri Sixes, \$33,000, at 84 $\frac{1}{2}$ @85. Operators rely upon an easy money market for sixty days, more than half the contracts being on time.

At the Second Board there were heavy sales again of Missouri Sixes at 84 $\frac{1}{2}$ @84 $\frac{1}{2}$ cash, 85 on time; New York Central at 82@82 $\frac{1}{2}$. The market indicates more strength than last week, and abundant capital to sustain speculation.

Compared with Saturday's closing cash sales, we note a decline in Virginia Sixes $\frac{1}{2}$; Missouri $\frac{1}{2}$; and an advance in New York Central Shares $\frac{1}{2}$; Reading Railroad $\frac{1}{2}$; Michigan Central $\frac{1}{2}$; Michigan Southern Preferred $\frac{1}{2}$; Cleveland and Toledo $\frac{1}{2}$; Rock Island $\frac{1}{2}$; Galena $\frac{1}{2}$.

Banking Decisions.—In the Supreme Judicial Court of Massachusetts, it has been decided, in reference to a note made in Vermont, by a resident of Vermont, payable "at Bank in Boston," that it is sufficiently presented to charge the indorser if presented at the Suffolk Bank only.

In the Supreme Judicial Court of Massachusetts, a case was recently decided in reference to "misappropriation of money paid," which claims attention:

J. Andrews, the plaintiff, living in New Hampshire, sent money by Express, to Boston, to pay his note at the defendants Bank. The carrier handed the money to the Teller, and told him it was to pay J. A.'s note. The Teller, by mistake, gave him the note of one F. A. The carrier did not examine the note, and the mistake was not discovered for some days, when it was too late to notify the indorsers upon the note of F. A., who was worthless. The Bank had, in the meantime, remitted the money to the holder of F. A.'s note, and had protested J. A.'s note, and he had paid it again to the holder, a bank in New Hampshire, with other money. Held, that the defendants must repay the money.

The receipts at Tide-water, New York, of flour, wheat, corn and barley, for the third week in September, in 1858 and 1859, have been as follows:

	Flour, brls.	Wheat, bu.	Corn, bu.	Barley, bu.
1858.....	46,655	290,508	292,305	42,886
1859.....	14,108	219,110	173,453	41,707
Decrease.....	32,547	51,399	48,942	11,178

The aggregates of the receipts of the above articles so far for the years 1858 and 1859, have been:

	Flour, brls.	Wheat, bu.	Corn, bu.	Barley, bu.
1858.....	1,178,530	5,738,631	5,041,229	486,315
1859.....	247,714	1,198,810	2,668,679	208,403
Dec.....	930,816	4,539,821	1,972,546	277,912

By reducing the wheat to flour, the quantity of the latter left at tide water this year, compared with the corresponding period of last year, shows a falling off of 1,838,781 barrels flour.



NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith
Branch of the Cairo and Fulton Rail-
road Co., Van Buren, Ark., Sep. 10, '59.

SEALED PROPOSALS for the graduation of the First Division of twenty miles eastward from Van Buren, will be received at this office until **Thursday noon, December 1st, 1859.** The work is divided into twenty sections of about one mile each, and proposals for either a part, or the whole of this Division may be made; but no bids for less than one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise. Estimates of work done will be made on the first day of every alternate month, and payments made on the first day of the month following; and fifteen per cent. of all estimates will be retained until the completion of the contract. Contractors desiring other terms of payment may bid accordingly, as the above terms are not positively settled.

The Company having a large amount of the finest Lands in Western Arkansas, will give preference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications may be seen, and all desired information obtained, upon application at the Engineer's Office, in Van Buren.

JESSE TURNER, President.

NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith
Branch of the Cairo and Fulton R. R.
Co., Van Buren, Ark., Sep. 10, 1859.

SEALED PROPOSALS for the Masonry of the First Division of twenty miles eastward from Van Buren, will be received at this office until **Thursday Noon, December 31st, 1859.** No bids for less than the amount of Masonry upon any one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise.

Contractors will state terms of payments, and proportions of money, stock and lands, and amount to be retained by the Company to secure the completion of the contract. The Company reserves the right to reject any and all bids at its option.

Plans and specifications may be seen, and all desired information obtained on application at the Engineer's Office, in Van Buren.

JESSE TURNER, President.

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANA OR SANDOVAL

FOR

Decatur, Springfield,
Bloomington, Peoria,
Burlington, Quincy,
La Salle, Rock Island,
Dixon, Galena,
Prairie du Chien, St. Paul, and
St. Anthony,
And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANA for all the above points.

Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all

TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS.

Gen'l Southern Agent, Cincinnati.

W. P. JOHNSON.

Gen'l Passenger Agent, Chicago.

MOSELEY'S WROUGHT IRON ARCH BRIDGES —AND— Corrugated Iron Roofs ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.

Spt. 2. MOSELEY & CO.

June 21, 1859.

Cincinnati, Hamilton and Dayton



RAILROAD.

FOUR TRAINS

LEAVE THE SIXTH STREET DEPOT DAILY

TRAINS RUN THROUGH TO RICHMOND, LIMA, SANDUSKY, AND DELAWARE WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND NORTH-WESTERN CITIES.

(Columbus time, which is seven minutes faster than Cincinnati.)

6 A. M. EXPRESS TRAIN—For Cleveland and Pittsburgh, via Delaware, makes close connection at Crestline for Pittsburg, Baltimore, Philadelphia, and New York; and at Cleveland for Dunkirk, Buffalo, Boston and New York. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 7:30 P. M., Quincy and Galena at 7 A. M. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Munice. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

8 A. M. MAIL TRAIN—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Pittsburg with STEAMER FOR DETROIT; at Forest with Sandusky, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at Delaware with the C., C. and C. Road, for Cleveland and points East. Also connects with Junction Railroad at Hamilton for Oxford.

4:30 P. M. TRAIN—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Also, connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago. Also connects with Junction Railroad at Hamilton for Oxford.

6 P. M. TRAIN—For Dayton, Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 8 A. M.

For further information and Tickets apply at the Ticket Office:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; at the new Ticket Office on West side of Vine street, between the Post Office and the Burnet House; or at the Sixth Street Depot.

D. McLAREN, Superintendent.

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circular which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the retort is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

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do do do 350 ".....	335 00
do do do 400 ".....	375 00
do do do 500 ".....	450 00
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The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and retort reservoir are extra, but the connections are furnished.

To enable persons requiring gas works, to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

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43 MAIN STREET, CIN.

W. HARVEY'S SAFETY JOINT For Coupling the Ends of "T" Rails. PATENTED, NOV. 2, 1858.

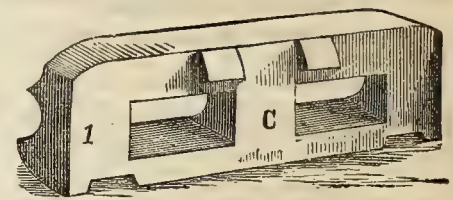


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

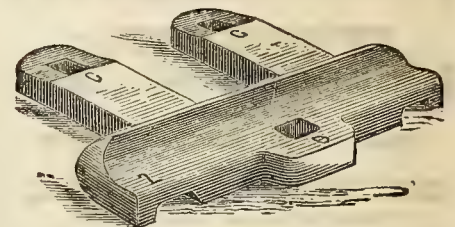
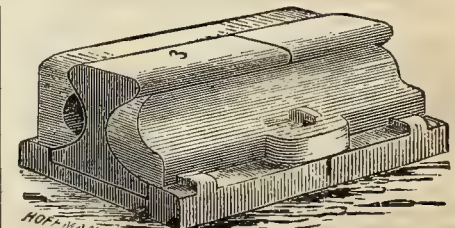


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing joints may be considered past improvement. It will be seen that on a part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly safe road, thereby doing away with the breaking of rails, wheels, and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear of the rolling stock of the road.

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Corby, Gossin & Co.'s make, for sale very
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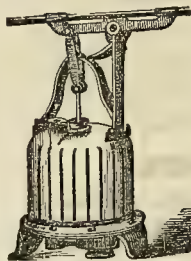
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SUCTION & FORCE PUMP

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as the best Pump now in use
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have used them to be perfect-
are simple in their construc-
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likely to get out of order; well
adapted for Steamboats, Rail-
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rapidly.

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Orders thankfully received and promptly filled at the
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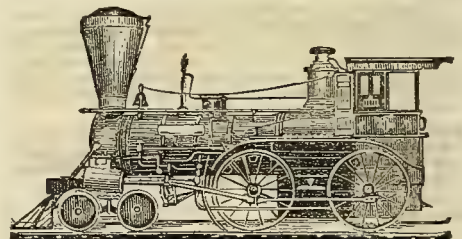
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Night Exp.	5 00 P. M.	4 00 A. M.	4 00 A. M.
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New York Exp.	5 15 A. M.	5 15 A. M.	3 30 P. M.
Steamboat Exp.	8 50 A. M.	8 00 A. M.	8 00 P. M.
Mail			2 30 P. M.
Cleveland Exp.	6 00 P. M.	6 00 P. M.	4 40 A. M.
Cincinnati Exp.	11 00 P. M.	11 00 P. M.	8 30 A. M.
Utica Accom'n.			10 00 A. M.

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Jan 5th.

The Railroad Record.

E. D. MANSFIELD, } Editors.
T. WRIGHTSON, }

CINCINNATI:

Thursday Morning, Oct. 6, 1859.

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In this No. of the Record we give an article from the Boston *Railway Times*, commenting upon our article giving the particulars of a test of Moseley's bridge for aqueducts. Also, Mr. Moseley's reply to the same.

SALE OF THE COVINGTON AND LEXINGTON R. R. YESTERDAY.—This road was sold yesterday at auction, at the Court-house in Lexington, Ky., for the sum of \$2,125,000. It is understood to have been sold to a combination of Kentucky and Cincinnati capitalists.

WILLIAMS' CINCINNATI DIRECTORY.—The work of canvassing for this necessary Annual for 1860 has already begun, and we trust our citizens will aid Mr. W. in his efforts to give us a reliable work, by furnishing him with the necessary information, promptly and correctly. The work will be much improved over any former issue, and in addition to the matter usually contained in it, will be found complete Directories of Covington and Newport, and a complete list of all the post-offices in the United States and Territories. By the way, would it not be good policy for our city passenger railroad companies, to subscribe for a sufficient number of copies to supply one for each car? And would it not pay for all the railroad companies centering in this city, to supply their passenger cars with a copy, for the benefit of strangers who may be on their way here for either business or pleasure?

THE MONEY MOVEMENT—EXPORTATION OF SPECIE—WHERE DOES MONEY GO?

Notwithstanding the enormous fact (for it is an enormity among commercial facts,) that the world has dug out of the earth (like potatoes) no less than *eight hundred millions of dollars in gold*, within the past ten years; and this, be it observed, in addition to all former mines and resources; notwithstanding, we say, this fact, yet gold no where accumulates; it seems to be no where superabundant. It has produced but little effect on the ordinary course of prices. It has in no way arrested the constant demand for specie, at all the great commercial points. On the contrary, at London, Paris, and New York, there is a constant drain of specie going on, without apparently any sufficient cause. All theories heretofore formed of the effects to be produced, by the gold mines, have proved so far erroneous. Is there any solution, on commercial or economical grounds for this phenomenon? Before we remark upon that point at all, let us look at the facts.

"The accounts by the Persia show a continued drain upon the Bank of England. In the last week, in face of enormous arrivals, the decline was \$1,600,000, and the whole decline from June 25 to September 3, was \$10,000,000, in addition to the great quantities that have reached there from this country, Australia, etc. This drain continues, and the United States must be a large further resource, notwithstanding the considerable quantities that have already gone. The quantity of stocks held there afford, while the inflation here continues, the fruitful means of drawing the specie, and the banks here have by aiding in the present state of the stocks done their best to carry gold beyond their reach. They have been satisfied to see the amount in bank maintain itself by receipts from the country equal to the sum of the exports, but what will be the result when the tide turns in favor of the country."

This drain upon London is but a type of what is taking place throughout Europe, and in New York and the United States to a still greater extent. Look at the movement of specie; in the great vaults of the United States, for the two years past, and see how significantly they speak.

We may compare the specie in the New York and New Orleans banks:

	1857—Oct.	1858—Oct.
New Orleans.....	\$3,228,917	\$11,163,328
New York.....	11,400,400	30,652,900
	1859—Feb.	1859—March.
New Orleans...\$11,187,593	\$17,013,593	\$12,924,130
New York..... 28,533,181	25,043,100	21,502,660

Last year, when the New Orleans banks gained \$6,000,000, the New York banks lost \$3,500,000. Since then with a small active cotton market the New Orleans banks have lost \$4,000,000, but they now open the most promising year they have ever had, with \$13,-

000,000 in vault. How will the accumulation run this year? The position of the whole interior is more or less the same. The specie which has run toward New York will be required to run back with greater vigor than it came. Whence is it to be drawn? The reservoir here at the financial center has been lowered, and it still falls, under an export equal to double the California receipts.

In October, 1857, the banks had been depleted, in a commercial crisis, till they were compelled to suspend payments, and then had but \$14,000,000 left. When the Banks recovered, confidence was, of course, restored, and coin immediately accumulated. This accumulation continued during the stagnation of trade, till in March, 1859, the banks of New York and New Orleans held \$42,000,000 in specie, just *treble* what they had done eight months previously. In the Spring of 1859, foreign imports began to pour in, and in mercantile phrase, trade began to revive. Now, look at the consequences:

In March—coin	\$42,000,000
In October—coin	33,000,000

But, mark, the banks had been drawing all this time on the interior, or they would have been compelled to suspend. As it is, the banks of New Orleans and New York have but *nine millions* of dollars, in six months, beyond their immense receipts from California and the interior. But the ability of New York to go on under this condition of things depends entirely on its ability to draw *farther on the interior*. Can this be done to any great extent? We think not; and the next six months will try the commercial strength of the Atlantic cities to a point, they have little thought of.

It is not on this point, however, that we would dwell; but, rather, on the questions, *where* does this stream of the precious metals *tend*; and will its current be ever arrested? No questions, in political economy, are more difficult than these, and as we have already said, the anticipations of even the wisest financiers and economists have so far failed. No satisfactory solution has yet been given to the phenomena of this continual increase of precious metals on the one hand, and the continual flowing away on the other. The *Economist*, from which we quote, says:

"The specie demand yet continues, because the European and Asiatic absorption is very strong, and the profit of sending it from this country is satisfactory. This is the only reason for which it goes. The demand which imparts the stimulating profit does not depend upon any commercial basis that will admit of calculation. The war has disturbed confidence in Europe, and promoted hoarding. The India war, change of government, and consequent loans, have stimulated the demand which before existed in that quarter. The Russia loan, and those of other governments, have added to the demand. Out of these circumstances, added to the large imports

here, the low prices of food, and the inactivity of trade, that keeps money cheap, grows the profit of shipping gold; and there is very little immediate prospect of that profit diminishing. The talk is, that the drain will cease with the new crop of cotton. The fact is, however, that since the discovery of gold, the only relaxation in its shipment that has taken place was during the panic of 1857, when nobody would or could pay. As long as prices of food remain low, stocks are high and trade inactive, gold will go. Its export will be checked only when by a rise in prices, and returned activity in business enterprises home demand absorbs all the available supply, and money becomes very dear. The demand for gold will stop the export, and the want of that which is now slipping away will be severely felt, affording to those who have drawn it here a new profit to re-supply it."

Now, this is to a certain extent just, and particularly so in the latitude of New York; but, is no solution, at all, to the great fact, that the masses of gold and silver are continually going from the great commercial points; and there is apparently no considerable return of it. Where is it, and why does it go?

On this point, we shall only suggest two causes of demand for coin; both of which are absolutely *immeasurable*, at the present moment, and for that reason, defy the calculations of political economists.

1. We find that England, France, and the United States which are the great commercial nations, and command the commerce of the world, are but a tenth part of its people. The other nine-tenths, in Russia, India, China, Asia, and Africa, have not yet arrived at that point of civilization, in which credit is created, and preferred for commerce. On the contrary, the other nine hundred millions of people *prefer* gold, and silver *when they can get it*; especially silver. If they can not get it, they consent, by necessity, to take other articles, and carry on commerce, by barter. But they prefer bullion, and demand it, when they can get it. The demand for silver and gold, among these nations, constituting nine-tenths the inhabitants of the earth, is just *in proportion to the ability to supply it*. That demand also can not cease, except in one of two cases: 1. When the supply ceases. 2. When the *wants*, for any purpose, whether of exchange or manufacture, among these nine hundred millions of people, are fully met. Now, when gold and silver was diminishing, as they were previous to the discovery of California and Australia mines, these people had to be contented with less, that is, to accept something else, in lieu of it. But, when these new supplies came, their demand increased, and the demands are met, and make the constant drain on the commercial reservoirs, which we have seen. This demand will gradually diminish, but not probably till a thou-

sand millions of gold have drained from this country.

2. As gold increases, luxury increases, and as a consequence, the use of precious metals, in *manufactures* increases. For example, one great source of demand for gold and silver in India and China, is that of ornaments for the Idols, and Temples, and Priests; in other words, for tribute to Idolatry. In Christian countries, the use of gold and silver ware, and of plated ware, is rapidly increasing. We can only here suggest these reasons for the extraordinary drain of gold and silver. But we believe them to be the most efficient causes of that drain.

For the Railroad Record.

DEVELOPMENT OF SOUTH-WESTERN ALLEGHANIES.

BY DAVID CHRISTY.

ADAPTATION TO PASTURAGE.

On this subject considerable information has been collected. There can be no doubt of the successful cultivation of the grasses upon the mountain lands. Several places were examined, where the Timothy and Herd's grass were growing as vigorously as they ever do at the North. The Orchard grass has not been tested in Cherokee county, but has been farther eastward. The analysis of this grass by Prof. Emmons, the Geologist of North Carolina, shows that it requires a large percentage of potash and but little lime for perfecting its growth. Prof. Proctor, of Tennessee, who has in charge the chemical department of the Geological Survey of that State, assured me, that there is a large percentage of potash in the soils of this county. They must, therefore, be well adapted to the growth of the Orchard grass.

Wm. Murdock, Esq., of Ashville, N. C., in reference to the cultivation of the grasses in the mountains, says that the experiment has been fully made, in his vicinity, with a success far beyond the most sanguine expectations. The uplands, he says, do not suffer from drought as the low lands do, and from his own knowledge of sheep-feeding, which extends over a period of forty years, he would prefer the mountains, properly prepared, to the low lands, and that preparation, he adds, can be made at no great expense.

Prof. Emmons is well qualified to judge of the adaptation of the domestic grasses to the mountain regions of North Carolina. In relation to Timothy, he speaks in positive terms as to its successful growth in the mountains; and, as to the other grasses, he thus writes, in his Geological Report, for 1859.

POA PRATENSIS—SPEAR GRASS—GREEN MEADOW GRASS—JUNE GRASS—KENTUCKY BLUE GRASS.

Kentucky Blue Grass. It bears the Summer heats in close, rich soils, and wants only size to render it one of the most valuable acquisitions to the farmer. It is perennial, and hence deserves the especial attention of the Southern planter, as there is a great want of good perennial pasture grass. Nor is there the least doubt but that it can be cultivated in the eastern and midland counties of the State. As for the western counties, no farther proof is required than what is already known of its ability to thrive there. This grass continues green and fresh in Western New York, frequently as late as December; it is probable,

therefore, that in a large portion of Western Carolina, it will continue growing most of the Winter. Although it continues to grow during a long period, yet it sends up its spike of flowers but once in the year, which, in this climate, is from about the first of June to July. It continues afterward to spread at the bottom and furnish a thick mat or growth of leaves. It, therefore, makes a good turf. It is not so particular in its selection of soils, as it grows on dry knowles as well as moist places. But still it flourishes best in a good soil, but here it is important to obtain a grass which will endure a drought and grow on poor soils.

As it requires time to attain perfection, it is not well adapted to an alternate system of husbandry, or when land is to be ploughed every two or three years. Shaded pastures furnish the best examples of this grass in Kentucky, where it ripens its seed about the tenth of June. In August it takes another vigorous shoot and continues to grow till stopped by the cold of Winter. When it dries up in the drought of Summer, it is still nutritious. It continues to furnish, under the snow, pasturage for mules, horses, and sheep. In Kentucky farmers sow in September or February. Some prefer a late Winter or early Spring sowing to save the tender plant from frost. It is sown both in open ground and woodland. If sown in woodland it should not be grazed until it matures seed. The seed is often mixed with Timothy and Clover, and half a bushel of the seed of Blue grass is sufficient for an acre. By mixing, the field may be fed at an earlier day. Ultimately, the Blue grass takes full possession of the field.—Prof. E. Emmons, Geological Report, N. C., 1859.

COCKSFOOT GRASS—ORCHARD GRASS—DACTYLUS GLOMERATA.

Orchard Grass. The Orchard is very widely distributed. It is well known in the north of Africa, Europe, Asia, and America. It is said that it was introduced into England from Virginia, where it now forms one of the most common grasses of English pastures, is highly esteemed among cattle feeders, being exceedingly practicable to stock of all kinds.

This grass is worthy of culture from its rapid growth, luxuriant aftermath, and its endurance of close cropping, and when fed down closely it recovers in a shorter time than any other grass under cultivation. It forms an excellent grass for mixing with clover; it is free from the objection which applies to the case of Timothy, as it reaches its mature state about the same time as clover. Hence it will be perceived that it is an earlier grass. The time for cutting it for winter food is when it has blossomed. If delayed until the seeds have ripened, it is far less valuable, as it loses at this stage its juiciness. Thick tufts of it form in pasture lands, when it is not fed close. As it regards resistance of drouth, it is well known that it bears it well, in which respect it is quite unlike the Timothy. Good observers declare that it produces more pasturage than any other grass. On this point the opinion of the late Judge Buel, of Albany, N. Y., coincided with other eminent agriculturists, and all agree in two other important points, viz: that it should be kept fed close and that when it has had only five or six days to recover, it acquires a good bite for cattle. These points give it a preference again over Timothy. Sheep are more fond of it than any other grass. It is less exhausting to the soil than many other nutritive grasses, which arises from the lightness and small amount of seed which it produces. A bushel of seed weighs only twelve or fourteen pounds.

Orchard grass, when sown sparingly and upon uneven ground, is disposed to grow in tussocks. This fault may be remedied by preparing the ground properly and sowing a sufficient quantity of seed. This grass, however, should not be cultivated by itself, unless it is wished to grow it for its seed. As pasturage is one of the great desiderata in this State, and as this grass stands dry weather remarkably well, it will probably be one of the most important measures in husbandry to encourage its cultivation. If sown with clover, one bushel of Orchard grass to ten quarts of clover seed makes the proper preparation per acre. If sown alone, two bushels are required. For pasture alone, a mixture of the white clover will form an excellent addition.—*Emmons.*

ANALYSIS BY PROF. WAY.

Silica.....	26.65
Phosphoric Acid.....	8.60
Sulphuric Acid.....	3.52
Carbonic Acid.....	2.49
Lime.....	5.52
Magnesia.....	2.22
Per Oxid of Iron.....	0.59
Potash.....	29.52
Chloride of Potassium.....	17.86
Chloride of Sodium.....	3.09
Ash per cent. dry plant.....	5.51
Water.....	70.00
Albuminous Matter.....	4.06
Fatty Matters.....	0.94
Starch, Gum, Sugar.....	13.30
Woody Fibre.....	10.11
Ash.....	1.59

PROGRESS OF VEGETABLE DEVELOPMENT.

The progress of vegetable development is a question of importance, when considered in its relations to the different altitudes of the mountains. Difference in elevation has the same influence upon the advancement of vegetation that is produced upon it by difference of latitude. A careful investigation of this subject is of importance to the horticulturist in commencing operations in North Carolina. The facts collected upon this point are, therefore, of interest to the public.

Leaving Cincinnati on the 10th of March, 1859, in company with two gentlemen of that city, we found the vegetation still locked up in the embrace of winter, though the weather for many days had promised an early Spring. On the 11th, at Louisville, the buds of the swamp elm, the swamp maple, and sweet gum were considerably swollen, and the blossoms of the elm forming. On the 12th, at Smithland, the peach blossoms were out, the leaves of the apple tree forming, and the lilac in leaf. From thence to Murphy, North Carolina, we found the vegetation in the valleys gradually progressing.

On the 27th of April, a special examination was made of the relative progress of vegetation between the valleys and the mountains. The point selected was the head of Valley River, where I had previously made a measurement of the height of Joanna's Ball—the most elevated point in that vicinity. In the valley the leaves of the forest trees had attained half size. In ascending the mountain they gradually diminished, so that at the height of 1000 feet, they were about the size of the feet of rats. This, however, was only in the more advanced trees, while in others the buds were just beginning to swell but had not burst. At 2000 feet above the valley, all the trees seemed unconscious of the presence of Spring. The plants and grasses at that elevation, were pretty well forward, because the sun's heat had reached their roots, and quickened them into life.

On the 9th of May, this point was again re-examined. The leaves on most of the trees in the valley had attained their full size, and at

1000 feet they were at half size; while at 2000 feet they were but little advanced, and none of them larger than rat's feet. Thus it appears that there is at least two weeks difference, to each thousand feet, in the vegetable development at this point. From 2000 to 3000 feet the buds of the trees were only beginning to swell, while the grass was well up the whole distance, and some of the flowering plants in full bloom.

On the 20th of May, the investigations were extended to Tusquitta Ball, about ten miles south of Joanna's Ball, and having about the same elevation—3000 feet above the valley. The trip was made in company with a hunting party. Vegetation, of course, was in advance of what I found it on the 9th. The oak leaves were yet very small, as we neared the summit of the mountain, and still retained their varied hues of red. They would not be fully spread, and assume their summer's green, I was assured, until the first of June. The leaves of the chesnut were about one-fourth size, being in advance of the oaks. The grass and common herbage was in fine condition, and the strawberries in bloom. The stock raisers of the valleys were driving their cattle to the top of the mountain, to leave them there until winter, without any other attention than an occasional supply of salt. There is about two months' difference between the progress of vegetation in the valleys, in this county, and the summits of the highest mountains.

GRAPES, FRUITS, FROSTS.

Upon the subject of Grape culture in the South-West Alleghanies, much information of importance has been collected. In reference to North Carolina, the Hon. T. L. Clingman has made the following general statement:

"The grape is indigenous in every part of the State, from Currituck to Cherokee, and among the hundreds of native varieties that are from time to time brought to light, after the neglect and waste of centuries, there are doubtless many which will equal, possibly surpass, the delicious Scuppernon of the Albemarle region, and the famous Catawba of Buncombe. With such indications, and our favorable soils and climate, why may we not in time approximate the vintages of France and Germany. In the wine districts of France, there are embraced in all about eight thousand square miles, a considerable portion of which consists of rocky steeps and terraces, unfitted for the production of the cereals, and yet the yield in wine is of the value of more than fifty millions of dollars annually, while the product of brandy is from ten to twelve millions. It thus appears that the whole yield from these eight thousand square miles of territory is equal to about one half of the average value of the cotton crop of the United States for the last five years. There is doubtless in North Carolina a much greater amount of land than this, suitable to the growing of grapes, and may we not hope, one of these days, to become a great wine producing community?"

Dr. WARNE, who is now engaged in mining in Cherokee county, as before stated, is fully conversant with the mountain lands of Switzerland, Germany, and France. He has visited Europe several times since he became an American citizen, twenty-two years ago, and has been a careful observer of the soil and products of both countries, and he does not hesitate in saying, that the mountain lands of this country are much more fertile, naturally, than those of the continent; and that hill sides and mountain slopes, there, are all under cultivation, even where they are much

steeper than the lands here. He assured me farther, that such lands as those of Cherokee, if in Germany or Switzerland, would soon be made extremely valuable by cultivation. An acre of land, well set in grapes, is valued in Europe at from three to five thousand dollars, dependent upon the quality of the wine yielded. In Switzerland, we heard it stated, that the value of terraced land is seven thousand dollars per acre.

Mr. N. E. Guerin, of Vinona, is located in the Frog Mountains, Polk county, Tennessee. These mountains are an extension of the Smoky Mountain. Near twelve years since Mr. Guerin had his attention directed to the abundance of the wild vines which he found growing luxuriantly at different elevations in the mountains, and from this fact was induced to attempt the cultivation of the grape. He is a Frenchman, thoroughly versed in science and literature, and had also pursued a course of study in Agriculture and Botany, in France. Before his arrival at Vinona, several Swiss and Germans had attempted vine culture in the valley, but it had turned out badly. Having spent a long time in the vine country of South and Middle France, Mr. Guerin hoped to remedy the difficulties which had discouraged his predecessors; and, accordingly, began his vineyards on the declivities of the hills, about 600 to 1100 feet above the Ocoee river. In these situations the effort has been very successful, mildew and rot never affecting the grapes, and frost very seldom killing the fruit buds. The vine here, he says, produces a third more than in France, and the wines may be made of as good quality—differing only in *boquet*. His wines keep very well, and, like those of France, improve in quality by age.

In reference to the quality of apples, the product of seedlings, in the South-Western Alleghanies, it is only necessary to quote the facts stated in the Franklin *Observer*, published in Macon county, North Carolina, Aug., 1859.

"Both the soil and climate of our section are peculiarly adapted to the successful culture of the apple. Trees are here vigorous in their growth, and live to great age. We remember some that were growing on an old Indian improvement, when we were brought to this valley a boy, some thirty-eight or forty years ago. They were then trees of respectable size and very prolific bearers. They are still living, are good bearers and seem as thrifty as then. We think they must be seventy years of age. This fact gives an assurance to orchardists that their labor will not be in vain. Another important fact in this connection is, that orchards planted with the first settlement of the country, wherever the localities were judiciously made, are exceedingly thrifty. We attribute the facts to the adaptedness of the soil and climate to the growth of the apple.

"The ingredients of the soil in all this primitive belt are such as are necessary to the most healthful development of the trees, and the perfect maturation of the fruit. Fruit grown upon a proper soil, having in its structure the necessary constituents, matures much better than fruit grown upon an illy adapted soil, and being better matured, of course keeps much longer. Our orchardists have found that some of our choice varieties will keep sound and retain their flavor until the Early June comes in as second crop. The quality of the fruit produced in Western Carolina is very superior. We meet with none, which for delicacy of flavor and excellence in every particular, that excels our mountain fruit.

"Our most esteemed varieties are nearly

all seedlings which have originated amongst us, all of which surpass the most popular varieties brought from the north and west. Even New York and Ohio are unable to furnish us with apples equal to our own. The simple fact that our best fruits are seedlings, goes to prove that our climate and soil are wonderfully adapted to apple culture. The pure mountain air combined with the adaptedness of the soil, furnishes amongst us localities unsurpassed, perhaps, in the world. We, indeed, challenge a comparison of fruit with any known section of our country."

The dried peaches of Tennessee and North Carolina have an unrivalled reputation in northern markets. Their excellence, of course, is due to the superiority of the peach. That the highlands of Tennessee and the mountains of North Carolina can be made to yield the peach in its greatest perfection, is a question about which there is no doubt. The only obstacle, at present, to the extended cultivation of the peach at the South, for the markets of the North, is the want of railroad facilities for transportation. This difficulty will soon be overcome; and then the only remaining problem will be whether the peach crop will be as certain as that of corn, or but once in every three to five years; as at the North. This brings me to the consideration of the subject of the extent and effects of the frosts in the mountain regions, a point that has been very fully examined, and affects the grape and apple crop as well as that of peaches.

On the subject of frosts, a more detailed statement of facts is needed to convey a true idea of its mode of action in the mountains; and farther examinations will be necessary, perhaps, before a correct theory can be established. Enough is known, however, to serve as a guide to the horticulturist.

Take a description of one point. Valley river has a length of seventeen or eighteen miles. It is one of the tributaries of the Hiwassee, and comes into that river, from the north-east. It is bounded on the South-west by the Tusquitta range of mountains, and on the North-west by Valley river mountain. Its principal tributaries take their rise in these mountains, where they unite in somewhat of a horse-shoe form—the concave portion pointing eastward, and the whole inner circuit of the great cove thus formed, facing to the westward. Joanna's Ball crowns this circular range, near its center, and is 3000 feet above the bed of Valley river. The gap in this range affording a passage over to Cheoah river, has an elevation of 2000 feet, and that to Nantahola river, a much less elevation—it being so low, indeed, as to furnish a practical route for the extension of the North Carolina Central Railroad, without tunnels or very deep cuttings.

On the 23d of March, last, I was shown the peach orchard of Mr. Eli Matheson, which is at an elevation of about 1000 feet above the valley, and faces west, so as to be exposed to all the winter's winds and freezes. It has been in bearing seventeen years, and, during that time, has failed only twice in producing full crops. These failures, it must be remarked, were not caused by *white frosts*, but by late *freezes*. Frosts have never been known to occur, at that elevation, with sufficient intensity to kill the fruit buds. On the 5th of April, and again on the sixth, the present season, a hard *freeze* occurred, which killed nearly all Mr. Matheson's peach buds—thus producing three failures in eighteen years.

M. L. Brittain, Esq., has, occasionally, noticed the range of the white frosts during the

spring and fall; and pointed out the elevation, around the head of Valley river, to which they usually extend. On one occasion the range was limited to a height of about three hundred feet, and formed a distinct line around the whole circuit of the cove—all above remaining green, while all below was blackened and withered by the frost.

On Shoal creek, north of Murphy, D. F. Ramsaur, Esq., has a peach orchard, originally planted by the Indians. He has known it twenty-two years, and it has rarely if ever failed in producing a full crop. Having but few trees, it is neglected, excepting in years of scarcity on the low lands, when it furnishes to him a supply of delicious fruit. It faces to the south, and has an elevation, he supposes, of about 1000 feet above Hiwassee river.

Near the head of Tusquitta creek, another branch of Hiwassee, there are two peach orchards which have borne fruit about in the same manner as that of Mr. Matheson, during the time they have been in bearing.

That there is great uniformity in the productiveness of orchards and vineyards, in elevated positions in these mountains, is a fact well attested. On this point William Muddock, Esq., of Ashville, N. C., in a letter to me of October, 1848, says: "I have been thirteen years in this neighborhood, and two in Pennsylvania, and during that time have always found peaches in the mountains when there were none in the valleys. I believe that at three hundred feet above the valleys, apples and peaches rarely, if ever, fail in a crop. Grapes, in the same situations, would be equally likely to be constantly fruitful and free from rot and mildew. There are situations in this district, high upon the mountains, where the European grapes have for twenty years borne twenty successive crops, without mildew or rot; and I know of many around me which they call English grapes, that do constantly bear; but on examination, I have never been able to trace out to be English or European grapes, and think the odds are much in favor of their being native. I feel quite satisfied that at certain altitudes the frost does not injure in late spring or early winter."

W. Zachary, Esq., of Cassius Valley, Jackson county, N. C., informs me that he has had peaches, in elevated positions, during twenty-four years; and that he has frequently noticed heavy frosts in the valleys when there was none in the high grounds. In the autumn he has noticed that the early frosts kill the corn blades in the valley and up the mountain side for a considerable distance, terminating its effects, often, abruptly along a single row of the corn, so as to form a perfect circular line around the mountain—all below becoming sere and brown, while all above retained its native green.

Mr. Guerin, of Vinona, thus wrote me: "You will remember, that I spoke to you of the permanent differences of temperature we find to exist at different altitudes upon our mountains. Starting from my garden, immediately surrounding my house, and ascending about two hundred and thirty feet, we pass a zone exposed to early frosts. Ascending beyond this, one hundred and sixty feet, we reach, upon the crown of the hill, a belt that the frost never touches. In this zone, the grapes and peaches, there cultivated, have never suffered loss in any season on account of the frost; and early in August, while the grapes of the lower zone had scarcely attained their full size, those of the top of the hill were nearly ready for gathering."

But the most particular account of the frosts

of this region is given by Silas M'Dowell, Esq., of Franklin, N. C. Before presenting his views, however, a few remarks are needed.

Any one who has watched the process of the formation of fog in a valley, during a calm night, when the moon was shining, will have noticed that it rises to a particular elevation, and there forms a well defined line; and that this line remains unbroken, generally, until the warmth of the morning's sun causes the mists to rise and disappear. The same law prevails when the rising vapor from the valley is not converted into fog, but remains transparent. A well defined line must bound its upper surface, as is the case with the fog. The presence of the accumulating vapor, whether opaque or transparent, imparts to the atmosphere a chilliness that does not exist in the dry air above. The transition from chilliness to warmth must, therefore, be instantaneous in passing from the one to the other. When the temperature of the air, loaded with transparent vapor, is lowered to the dew-point, then the vapor descends to the earth and covers it with dew; but when the temperature falls to the freezing point, then the vapor strikes the vegetation with white frost. It will be easy now to understand why dews and frosts should prevail in the lower grounds, or along the courses of mountain streams, while the highlands are, generally, exempt from them.

These points need farther examination. The Hon. T. L. Clingman cites a region where frosts and dews never prevail. He does not say that his opinion is made up from personal examination. Even should it be so that no dew falls in the higher parts of the mountains, to refresh the vegetation in the absence of rain, yet this apparent defect is amply provided for by the ascending fogs of the valleys, in the mornings, which, in the vicinity of the larger streams, always cover the vegetation on the mountain slopes with a load of moisture.

Mr. M'Dowell divides the atmosphere in the mountain regions into what he terms the *frost belt*, and the *thermal belt*: the first occupying the space from the valleys to a point of elevation from three hundred to four hundred feet up the mountain slopes; and the second resting directly upon the first, and extending about four hundred feet higher. But he must be allowed to make his own statement, a few verbal changes only being made in his language.

"At a very early period of my life, I turned my attention to the cultivation of the vine, below the *thermal stratum* and within the *frost stratum*. My labors were prosecuted for ten years, but I utterly failed from *frost*, *mildew*, and *rot*. While I was thus disappointed, some poor men made them farms in the mountains, within the *thermal stratum*, and planted fruit trees, and vines of the foreign grape—the Black Hamburg. In twenty years their fruit crop has never been frost-killed, though there has been an instance of its failing from a late freeze. But in all this time, these few vines, left free to spread their wild luxuriant tangle among the branches of the trees, have never failed to produce their grapes, without any sign of rot, mildew, or puncture of insects.

"I have devoted much attention to the subject, and find the causes producing these results to be as follows: In the spring when there is a change from heat to cold, a frost can not take place until the atmosphere becomes tranquil. The warm earth is at the same time radiating its heat and warming the surrounding air, so that it becomes lighter and rises to an atmosphere too thin to support it, where its upward progress is arrested. Its place below is filled with a cold, damp, heavy

atmosphere, which rests on the surface of the lowest valleys, where the heaviest frosts always take place. This cold, damp, frost stratum, in our valley, near Franklin, I find to be something over three hundred feet in depth; and upon the top of this rests the thermal stratum. The junction of these two strata of air is so complete, and their distinctive properties are so well defined at the line of junction, that the lower half of a shrub will have its leaves and flowers completely blackened by frost, while its top is unharmed and retains its richest verdure. The frosts of the 27th and 28th of April, 1858, killed all kinds of fruits in our valleys, while the few orchards which are near the sources of our brooks, in the mountains, were loaded with fruit; because they were above the frost line, and within the balmy influence of the thermal stratum. I have this summer taken the depth of the thermal stratum, and find it near four hundred feet vertical height; and, beyond that, the atmosphere becomes so cool, though too dry to produce frost, that it froze out the young fruit germs. Of nights, when there was frost, I have ascended into the thermal belt, and, on reaching the line separating it from the frost belt, have very sensibly felt the warm air meet my cheeks."

(To be continued.)

THE MOSELEY BRIDGE VS. THE BOSTON RAILWAY TIMES.

Editors R. R. Record:

Having observed the following editorial in the *Railway Times* of Boston, 24th September, which, after inserting your article upon the test of a bridge for aqueducts in our (Moseley & Co.) factory yard, contains some of the most absurd declarations, and as I am the author of the bridge and you the article copied in the *Times*, please let me defend the bridge while you take care of your editorial.

We have never had much faith in the above structure, [Moseley's Tubular Wrought Iron Arch Bridge] and do not agree with the conclusions of the *Record*. We do not consider the arch the best form for a bridge, at any rate, unless the arch be of stone or cast iron. The arch certainly is not the most economical form in which wrought iron can be placed, as wrought iron does not resist nearly so much compression as extension. All experience does not show the arch to be the best form in which to dispose the material of a bridge when the strength depends upon the power to resist crushing; as we think the believers in the Moseley bridge will see if they take any span over 200 feet, give it the necessary rise to get the arch not too flat, and compare the amount of material in such a bridge with the amount in a Bollman, or any other horizontal truss. That it is built as above stated of the best material, we do not admit, considering the mode of application of such material, as wrought iron is submitted to compression. In a span of 200 feet and upwards, we do not believe that either cheapness, lightness, durability or strength, would be attained for the money which a horizontal truss would give them. We have never before heard it said that the Moseley bridge was the best turnpike bridge in use, though we believe it better fitted for such a purpose than for any other; as there is not much required of such structures. That it will be adopted as a railway structure we do not believe; as its lack of stiffness entirely unfits it for a vibrating load, or for anything but a dead weight. That it should hold up a permanent load like an aqueduct we can easily see; but where there is a shaking load like a locomotive, we believe the bridge entirely unfitted to do any duty whatever. It must have, like the Niagara bridge, a stiffening truss; and in such case, the suspension principle is better, because the iron there is submitted to the strain which it is best fitted to resist, viz., tension. We should like to see the rise and weight of a span of 200 feet, upon this plan, compared with the cost of a common truss bridge and with that of a suspension bridge; as with an equal strength, and what is not a whit less important, equal stiffness, we believe the Moseley bridge would be more expensive than the forms at present used. We should like to hear how many of these bridges have been erected—and how large they are—and what they cost per foot.

This editor says stone or cast iron makes the best arch. Stone is best, (if the stone is of the proper quality,) though not the cheapest, but most durable.

But when he asserts that cast iron is better than wrought iron for an arch, he virtually tells the world he does not understand the subject about which he is writing.

The object generally in substituting iron for stone is—because the former is stronger than the latter, and, consequently, requires as much less of material for the same purpose, as it is as much stronger; hence the difference is so great as to make the iron the cheaper, generally of the two. Cast iron by compression (as in our arch) will bear 100,000 lbs. pressure to the inch; sand stone 6,000 lbs.; granite 11,000 lbs.; lime stone 8,000 lbs. So to make a stone arch strong you must use heavy materials. Cast iron to be cheap enough must be light, and if it is light, it is not stiff enough, because it has too little elasticity; consequently it is liable to spring and deflect, and in so doing (having little elasticity) it is always liable to rupture and fail. Wrought iron bears 116,000 lbs. to the inch pressure. Now every one knows that wrought iron will spring and not rupture with much greater weight than can be put upon cast iron. So in this the wrought arch is safest.

Cast iron will bear a tension 15,000 lbs. to the inch; wrought, 60,000 lbs.

Cast iron bears in transverse (cross straining,) only two-thirds what wrought iron will bear. Note these facts and figures.

The *Times* argues that a truss is the only safe plan for a stiff bridge. I assert that no truss is safe, nor was there ever a good truss made that had not an arch in it, and then the truss must be in height—one-tenth its span.

Let me say to the editor of the *Times*, that I invariably insert a solid truss or vertical plate in the hips of my arches, for common roads, and will also make a solid iron plate truss for every span on each half of the arch for railroad bridges, the truss acting as a chord from the underside of the arch at the crown to each heel of the arch—this gives rigidity at the hips, where it is needed, because in the center of the span the arch is strong and perfectly rigid.

I think the *Times* editor must have had an apprentice whom he has started off in practice, upon iron bridges, and he must have taken his ideas from his rope swing, knowing it holds him to pull at, but makes a poor walking cane.

Wrought iron, I beg to repeat to the writer in the *Times*, will bear in squeezing or compression 116,000 lbs. to the square inch; and the best American Carp river, Lake Superior, (the best in the world) will bear in pulling or tension, 90,000 lbs. to the inch; the best wire will go to 150,000, and here is where the young editor has found his starting point. So let me ask him, if he knows, how many inches of the cables of a suspension bridge it is that generally bears the burden? Of a very hot day the outer wires expand soonest, and then the inner ones are shortest and bear the

burden, and when the cooling process takes place, the outer ones cool and contract first, and then they are shortest and bear the burden. So one set is first overstrained, which yield or stretch to let the others take a portion of the burden and *vice versa*, when the cable begins to sag and deflect, until, in time, its strength is lost and the bridge is useless; and, besides this, the weight of cables, floors, etc., from gravitation, are continually pulling at the cables, and when they expand to their utmost, not having the same gravitating influence, or any other force to aid it back when it contracts, it fails to come again to its original position, and it thus continues to yield to those influences until its final severance. Suspend a wire, say No. 12, across a room and hang at its middle a ten pound weight (one-twentieth its capacity,) and note its position carefully, and it will be found to be getting nearer the floor every year until it reaches it, or the wire parts. Now this is not the case with the arch, gravitation always aids in keeping the particles of iron united and pressed together, instead of severing them, as shown in the suspension or tension. These are facts well known to every scientific man, and I will leave them for the reflection of the reader.

All I have to do in my plan of bridging is to keep up the calibre of the arch, size of metal in it, and apply at the proper place, just truss enough to make the hips equal to the crown in vertical rigidity, and I have the best and cheapest bridge. The triangular hollow arch is the stiffest, strongest and most economical method of applying iron for an arch. These I increase with the increase of span. Now as to the editors enquiries about the weight, cost, height, etc., of my bridges, by way of comparison with other structures, I don't know the weight of metal in a suspension bridge, but mine is not one-sixth that of a truss. I can build an iron bridge across the Niagara river, 700 feet span, weighing, all told—of iron—573 tons. The arches, two of them, united at their sides, 5½ feet on every angle and three-fourth of an inch thick would be my sizes, and I will warrant its holding 2,000 tons dead weight. I can not get the exact cost of the Suspension Bridge at the Falls of Niagara, but some have stated it to be \$400,000; others \$800,000. I can build mine for \$300,000. I also understand that efforts are making to build a bridge across the Niagara river at Buffalo, some 1,600 feet long, and I have never heard any price being named for such a bridge of iron at less than \$600,000. I will build it with four spans, piers and all, for \$300,000, and take \$20,000 in stock.

Now as the editor of the *Times* seems to understand all about these things, can he tell me whether that extraordinary strong, wooden trussed, iron, suspension, rigid bridge across the Niagara river has or has not deflected or sunk down some eight or nine inches? This

I have more than once understood to be the case.

Now for the 200 feet span. I have always urged that the longer the span the better and stiffer the bridge. The reason of this is, that in addition to the increase of calibre of arch, and the thickness of the plate, the dead weight of the structure holds it more substantially to the abutments, and the opposite portion of the arch to the travel pressure is not so easily counter poised or moved, and all the experience thus far proves it. Our 125 feet spans are much less flexible than those of less spans.

A 200 feet span for common roads will weigh twenty tons, and we sell such out of our (Moseley & Co.,) factory at \$24 per foot. Floor and raising would cost say \$6 more, making \$30 per foot total. A 200 feet railroad bridge would weigh 41 tons—800 lbs., and would cost, at our factory, \$51 30 per foot; raising, etc., \$6 more, making \$56 30 complete. Height 24 feet.

Again, the editor desires to know how many of these bridges have been built, and their spans. I answer 30, and of spans from 32 to 125 feet. Two of these are turn or revolving bridges; one at Chicago—two spans—163 feet whole length, and one at Galena 197 feet, and a boy can turn either of them. One cost \$11,500; the other \$17,000.

The prices of the ordinary structures already made varies with the span. Any span under sixty feet we sell at \$8 88 per lineal foot, and a 300 feet span \$34 88. Intermediate spans have corresponding prices. So now let those who know the prices of suspension bridges and trusses, figure the comparisons between our respective bridges as to strength and economy, and let me close by saying that I can take a bridge over any span whatever—where a suspension bridge can go, at 20 per cent. less cost, and as the spans increase, the advantages increase in my favor.

THOS. W. H. MOSELEY.

THE TRANSIT TRADE WITH THE WESTERN STATES OF AMERICA.

When Sir J. Pakington announced that the navy would have to be reconstructed, the term was considered at the time far-fetched and an exaggeration; subsequent revelations, however, prove that he correctly appreciated the changes which were required to be made to meet the wants of the age, arising from the improvement in steam, gunnery, and naval construction. A similar re-construction of our ocean mail routes must shortly follow, and also of goods and passenger transit between Europe and the Great Western States of America. To understand the question in all its bearings it will be necessary to go back a quarter of a century to trace the changes that have taken place since the establishment of steamships and railways. Prior to the opening of the Erie Canal, in 1828, the produce of the States bordering on the Lakes passed down the St. Lawrence, which was the only outlet to the sea-board at Quebec; but no sooner was the Erie Canal opened, although only having a depth of four feet, than the trade was inter-

cepted at Buffalo, and diverted to the Hudson and New York, this port being open all the year round, while the ports of the St. Lawrence were closed for six months.

The rapid rise of the commerce of New York dates from this period, and which was afterward greatly accelerated by the progress of railways toward the Western States. The whole of the imports then went to New York, ready to be forwarded on the opening of the canal and lake navigation. The New York packet ships, once so celebrated, carried all before them on the ocean, and the floating palaces on the Hudson and Lake Erie were the admiration of all, until the ocean steamers and railways took away their traffic, and they now no longer exist. The Erie Canal has been annually losing its traffic, and it is now proposed to sell it, as was done in the case of the Pennsylvania State canals.

The repeal of the corn laws, and subsequently the navigation laws, gave an impetus to the New York Central Railway, and to the shipping at New York, which was the final blow to the St. Lawrence route. Great discontent prevailed in Canada in consequence, and it was conceded by all that the only way to regain the vast trade of the West, was to construct a trunk railway from Sarnia to Quebec and Portland. Toward this £3,111,500 were subscribed, and in November next it is expected the line, with the Victoria bridge, will be opened from Portland to Detroit and Chicago, without a break—a distance of one thousand one hundred and thirty-eight miles—with a weekly line of mail steamers to Quebec and Portland from Liverpool.

The geographical advantages of the route are apparent, Quebec being some five hundred miles nearer than New York, with the railway connecting with shipping at Quebec, Portland and Sarnia, which saves cartage and time.

At Three Rivers, about ninety miles above Quebec, the tidal flow ceases, and steamers have to contend against a strong current, requiring the aid of great power, to overcome the resistance, especially at the rapids below Montreal; above Montreal the St. Lawrence canals have to be passed before entering Lake Ontario, and the Welland Canal before reaching Lake Erie, in all sixty-nine miles of canal, and detention in the passage of the fifty-four locks, involving heavy tolls on goods, marine insurance &c., &c.; from Lake Erie the transit over the shoal water of the St. Clair River to Lake Huron, is attended with considerable danger, shown by the annual casualties. At Sarnia, the entrance to Lake Huron, the current runs at the rate of seven miles an hour; in short, to overcome the current the propellers are compelled to be equipped with powerful machinery, and as the season barely lasts six months, the forwarding companies have been one by one retiring from the unequal competition; and next the fine passenger steamers which are still running between Toronto and Montreal will become matter of history, like the sister vessels on the the Hudson and Lake Erie.

We are among those who consider steam yet in its infancy. We believe that steamships of ten thousand tons will become common, that iron sailing ships of one thousand tons will supersede wooden, and that the principle of the construction of the Great Eastern will become general.

We have thus briefly given a history of the artificial means by which a great trade has been diverted from its natural channel and the means adopted to restore its old course. Portland and Quebec can admit the Great Eastern afloat at the wharves, while New York barely affords the required depth of water for the

Persia. It will be curious to trace the effects of steam on shipping and trade connected with Canada and the Western States. The financial operations of merchants and contractors in the Western States are conducted at New York and Montreal: these again are in correspondence with Liverpool or London. The question of transit, say on 10,000 tons of iron to Chicago from Liverpool, depends, therefore, on the ocean freight, insurance and railway, or railway and water transit combined, whether New York or Quebec is selected: and as the tonnage from the lakes exceeds 6,000,000 there is ample scope for enterprise on the part of the ship-owners and the managers of the Grand Trunk Railway, especially as Quebec is always a loading port, which New York is not, excepting when breadstuffs command a high price in England.—*Liverpool Journal, September 3.*

COVINGTON AND OHIO RAILROAD.—A Convention of the friends of the Covington and Ohio Railroad was held in Putnam county, Virginia. Kanawha, Cabell, Mason, Putnam, Logan and Wayne counties were represented. Col. Joab Early, of Putnam, was elected President. In the preamble adopted is set forth the importance of finishing the road. The resolutions adopted assert it to be the true policy of the State that such an appropriation should be made to this road, at the coming Legislature, as will be sufficient to complete the entire road, and that at least \$2,000,000 of such appropriation should be annually expended on the road until the same is completed to the Ohio river. A committee was appointed to lay before the Legislature, at its next meeting, a memorial embodying the proceedings of the Convention. —*Enq.*

IRON CROP OF GREAT BRITAIN IN 1858.

It is gratifying to find that Mr. Hunt has been enabled to obtain the iron ore produce with more than usual accuracy; the subjoined table giving the result of his labors:

	Iron Ore.		Iron, Value.	
	Tons.	Value.	Tons.	Value.
General.....	55,150	£ 19,988 14 1	.....	.....
Dorsetshire.....	4,754	2,937 7 9	.....	.....
Gloucestershire.....	107,632	48,443 8 0	.....	.....
Somersetshire.....	56,041	13,020 14 0	.....	.....
Wiltshire.....	9,822	4,615 9 0	.....	.....
Hampshire.....	1,406	2,786 18 0	.....	.....
Northamptonshire, etc.....	29,510	35,121 5 0	.....	.....
Warwickshire.....	92,510	11,060 0 0	.....	.....
Staffordshire, North.....	699,947	94,978 0 0	.....	.....
Staffordshire, South.....	950,000	930,000 0 0	.....	.....
Shropshire.....	150,510	313,139 0 0	.....	.....
Derbyshire.....	329,950	89,927 0 0	.....	.....
Yorkshire.....	1,057,143	255,365 18 0	.....	.....
Northumberland and Durham.....	90,924	9,416 0 0	.....	.....
Cumberland.....	348,638	187,478 0 0	.....	.....
Lancashire.....	438,546	230,926 13 0	.....	.....
Wales, North.....	88,565	35,980 0 0	.....	.....
Wales, South.....	723,231	257,345 14 0	.....	.....
Scotland.....	2,312,000	750,000 0 0	.....	.....
Ireland.....	3,610	1,170 0 0	.....	.....
Isle of Man.....	565	566 9 0	.....	.....
Total.....	8,040,959	£2,270,701 15 10	3,456,064	£10,360,192

For smelting the 8,000,000 tons of ore, referred to above, 617 blast furnaces were employed—332 in England, 153 in Wales, and 132 in Scotland.

The rapid progress which the iron trade has made within the last few years is shown in a recent parliamentary return, which states that in 1844 the total value of the iron and steel exports of the United Kingdom was £3,191,541. In 1858 this total had risen to £11,197,072, although this amount was not so great in 1857 or 1856. The following table shows more in detail the extraordinary expansion which has taken place:

	1844.	
Iron, pig.....Tons	99,877	£ 316,490
" bar, bolt and rod.....	249,832	1,498,141
" cast.....	18,944	188,972
" other kinds.....	1,963	46,931
" wrought of all kinds.....	82,771	949,515
Steel, unwrought.....	6,120	192,392
	1858.	
Iron, pig.....Tons	263,143	£1,084,170
" bar, bolt, and rod.....	687,311	5,624,367
" cast.....	78,192	822,979
" other kinds.....	10,220	209,078
" wrought of all kinds.....	193,515	2,866,787
Steel, unwrought.....	16,878	589,676

The declared value of the steam engines and machinery exported in 1844 was £776,151; in 1858 the total had risen to £2,599,352—an increase of nearly five hundred per cent. in fourteen years, and a convincing proof that, notwithstanding the increased exportation of iron, British mechanical skill continues to carry all before it.—*London Mining Journal*, August 13.

"THE RAILROAD RECORD."

This valuable Journal is published at Cincinnati, Ohio, weekly, by Wrightson & Co., at \$3 per annum in advance. It publishes all information of interest, in regard to railroad matters throughout the Union, and is well worthy of patronage. Indeed, the information imparted by it commends it to the patronage of capitalists, and men of enterprise everywhere.

In its issue of the 8th inst., it copies all of our article on the subject of the Alabama and Florida Railroad with the extracts which we made from the the able report of Col. Pollard, the President of the Alabama end of said road. The Editor could with truth also inform its readers throughout the great west, that we expect, and have every reason to believe that we shall have a continuous line of rail from Pensacola to Cincinnati, St. Louis and Chicago in 30 months at farthest. The public spirited and enterprising Alabamians intend to construct speedily a line of railway from Montgomery to Decatur, or some point on the Tennessee line to connect with the railroads of the west. It is the best and most direct route to the Gulf of Mexico, the Caribbean sea, the West India Islands, Mexico, Central and South America, that the Great West can possibly obtain for their trade and travel with those parts of the world. Coffee, sugar, molasses and tropical fruits can be shipped at Havana, via Pensacola and Montgomery, and put down in Cincinnati in five days, as soon as our railroad connections are made with the west—when by New York or any other Northern port, it would require ten days at least if steamers are used, and fifteen days, if you depend on sail vessels. Think of that you men of "Porkopolis!" and then, the direct trade between this section and yours, is no small item to your farmers and stock raisers; now your produce has to pass through two intermediate agencies, with all the taxes of their profits and reshipment, &c.,—then, it will come direct. Many, many other benefits will result by opening up a new,

speedy and direct route to the Northern Lakes from the Gulf of Mexico, which will readily suggest themselves to every intelligent mind.—*Pensacola Observer*, Sept. 22, 1859.

SEMI-ANNUAL REPORT OF THE PITTSBURG, FORT WAYNE AND CHICAGO R. R. CO.

"The Board of Directors, in accordance with the by-laws, submit the following report of the operations of the company for the half year ending June 30th, 1859: The capital stock of the company, at that date, as shown by the general exhibit of the Auditor, amounted to..... \$6,263,438 33 Amount of Mortgage Bonds on road and real estate issued to that date..... 9,267,910 00 Floating debt of all classes, including \$35,595 due on coupons unpaid and to be funded..... 1,925,156 56 Current expenses for June, to be paid in July..... 113,001 24

Amount..... \$17,569,506 13 The total cost of the road and equipment to December 31st, 1858, as shown by the last Annual Report, was..... 14,631,110 15 Which has been increased since that date as follows, viz: Unadjusted accounts chargeable to cost of road prior to August 1st, 1859— Ohio and Penn. R. R. Co..... \$1,618 12 Ohio and Indiana R. R. Co..... 7,806 14 Ft. Wayne and Chicago R. R. Co. 982 44— 10,406 70 Construction expenditures during the six months ending June 30th, 1859, on Eastern Division..... \$19,278 05 On Western Division..... 530,494 77— 549,772 82 Discount on Bridge Bonds of O. & P. R. R. Co..... 4,285 00 Discount on Mortgage Con. Bonds of P., Ft. W. & C. R. R. Co..... 24,695 00 Premium on Ft. W. & C. R. R. Co. stock.. 48 49

Total cost of road and equipment to Jan. 30, 1859..... \$15,220,318 16 Cost of real estate owned by the Company, exclusive of depot grounds and roadway.. 964,807 08 Stock and bonds of other companies..... 91,100 00 Fuel on road and materials on hand at the Company's shops..... 100 88 37 Cash and bills receivable—good..... 132,896 88 Mortgage Bonds and notes in the hands of the Chief Engineer and other Agents..... 649,135 77 Accounts receivable, bad and doubtful, including \$69,581 93 deficit in account of W. Larimer, Jr., former Treasurer of the Ohio and Penn. R. R. Co..... 121,791 91 Coupons due in New York July 1st, 1859, paid in June..... 940 00 Balance to debit of income account..... 287,595 16

Total..... \$17,569,506 13 The earnings of road from all sources during the six months ending June 30th, 1859, were..... 830,689 43 The expenses during the same time were as follows: Conducting Transportation..... \$125,084 85 Motive Power..... 218,783 17 Maintenance of Way..... 164,800 70 of Cars..... 61,486 15 General Expenses..... 25,691 93— 509,825 87

Earnings after deduction of operating expenses..... \$230,863 56 Less six months' interest on floating debt..... \$44,666 35 Discount on currency received Agents..... 1,684 53 Commission allowed for services in funding coupons..... 1,043 70 Six months' interest on funded debt..... 312,126 50— 359,521 08

Amount..... \$128,637 52 Less Discount on Sinking Fund bonds, redeemed by Trustee..... 2,607 44 Showing an excess of expenses and interest over the total earnings for the six months of..... \$126,050 08 The earnings for the past six months as compared with the same months of last year, are, Total earnings for first six months of 1859..... \$830,689 43 1858..... 706,515 07

Increase..... \$124,174 36 A comparison of expenses for the same time results as follows: Expenses for the first six months of 1859..... \$509,825 87 1858..... 439,957 70

Increase..... \$159,868 17 Which is explained by General Superintendent in his semi-annual report to the Board of Directors, as follows: "The character of this result is attributable to two causes; to the large extraordinary repairs required on the track, machinery and rolling stock, and to the small amount of business offered, with the consequent low rates charged for its transportation by competing lines."

There are on hand, on Eastern Division, 72,575 cross ties, also chairs and spikes, valued at \$1,407 43; on Western Division, 35,236 cross-ties, 1,884 chairs, and 7,768 lbs. spikes.

The increase in expenses in the several departments of service, details of which will be found in the tabular statements of the Auditor's Report, herewith, is attributable to the increased length of Road operated, and the past condition of the roadway, rolling stock and motive power.

Large expenditures have been made upon motive power in repairs and renewal, and it is now generally in fair condition.

Four passenger cars have been added by purchase to the number on hand January 1st, and four sleeping cars were placed on the road by Messrs. Woodruff & Co., under a contract made with them by which their ownership remains in the contractors.

Nine new passenger cars have been built to replace the same number worn out, and five more are now condemned as unworthy of repairs. Fifty stock cars have been leased from the Pennsylvania Railroad Company upon favorable terms, and those previously in use repaired. A large amount of repairs have been made and are still required upon the box and platform cars, which will be executed as fast as possible. Nearly all of our freight equipment is now in service, but it is feared will be inadequate to the business of the road during the coming fall and winter, and may have to be increased either by purchase or construction in the shops of the company, as our means will admit.

The Board congratulate the stockholders that not one dollar has of floating debt for labor or materials has been incurred since the 1st of August, 1858; but on the contrary, that debt has been reduced.

By funding into bonds..... \$179,142 81 By cash paid to redeem bonds pledged as collateral taxes, &c..... 147,763 35

Making total reduction..... \$326,906 16

These cash payments were rendered necessary to protect the interests of the Company, and to prevent the sacrifice of its securities.

The floating debt amounts to \$1,889,561 56, to dispose of which the Company has no other resource than their mortgage construction bonds and the surplus net revenues of the road, after the payment of interest on the bonds. The exchange of this debt for these bonds will give to the holders a safe security, instead of one subject to the contingencies that now surround it. The Board, therefore, must again urge upon the holders of these claims the importance of aiding it in disposing of this incubus upon the credit of the company. With the floating debt discharged and the line in good condition, there does not seem to be a reasonable doubt that the increasing revenues of the Company will be sufficient to meet the interest on its debt. As an evidence of the soundness of this expectation, it may be mentioned, that while the receipts of all parallel lines have decreased, those of this Company are steadily on the increase. By order of the Board, J. EDGAR THOMSON, Pres't.

T. HASKINS DE PUY, Acting Pres't.
Pittsburg, September 5, 1859."

RAILROAD ACCIDENT.—The engineer and three other persons on the Cleveland, Columbus and Cincinnati Railroad were recently severely injured by the breaking of one of the locomotive wheels. The engine and several passenger cars were thrown off the track and pitched down an embankment twelve feet high. The locomotive and tender were completely wrecked.

SOUTHERN PACIFIC RAILROAD.

The Southern Pacific Railroad was sold, on Tuesday last, under execution, and purchased by Gen. R. V. Richardson and associates. This sale and purchase rids the enterprise of the clogs and disabilities to its success which existed, and which have suspended the progress on the work. The enterprise is freed from all contracts and every weight, and every "deadhead."

The adjustment of the difficulties between what is known as "the Old Company," represented by Dr. Fowlkes, as President, and the "New Company," represented by L. P. Grant, as President, are progressing satisfactorily to all parties concerned. Entire unanimity of feeling and understanding exists, and in good faith the whole arrangements will be consummated within the next day or so.

Dr. Fowlkes has made his payment as called for under the compromise of the 6th of April last, and has deposited sufficient means to cover and extinguish the entire indebtedness of the old company in Texas. He is actively engaged in settling all and every transaction, open, unliquidated, or due, not only under the compromise *but outside of it*. He seeks to free the company, and has abundant means to do so; and our people, the creditors and claimants, are giving him every assistance and facility in their power.

The State suit will be dismissed, and the fullest sanction given to the efforts of Dr. Fowlkes, for the freedom of the enterprise and the protection of stockholders of the road, which can be imparted by the laws of the State. Stockholders, therefore, who have contributed their means to aid in the freedom of the enterprise may rely upon full protection.

A final settlement of matters in Texas accomplished, to the satisfaction of all parties, a union between this company and the Memphis and El Paso company will be made. The interests of all parties demands such a union, and therefore ensures the result.

It is intended under a re-organization following a final settlement, to elect J. Edgar Thomson, President, before Dr. Fowlkes leaves Texas; but he does not accept until the settlements are finally completed. This can be speedily done. Dr. Fowlkes believes that within thirty days from the time he can leave Texas, he can meet the terms required by Mr. Thomson, and secure his acceptance of the Presidency. This will present a new era in this enterprise. Mr. Thomson has the reputation of being the first railroad man in the Union. He brings to the company an enlarged experience, integrity, vigilance, and the confidence of financial men. Texas will present to him a hearty and cordial welcome, and facilitate him by all reasonable and proper legislation. If possible, Mr. Thomson will visit Texas, and present to the ensuing legislature such suggestions of what modifications he deems essential to this railroad improvement.

Dr. Fowlkes, before he leaves here, will resume the work upon the road, and complete at an early day the next section of twenty-five miles. We learn that he has already purchased the iron, locomotives, &c., for this portion of the work.

With the dead weight cut off, the Company free from debt, and its property, at a fair cash valuation greater than the amount of stock issued, it will present a field for capital and enterprise, such as cannot be found in any other railroad enterprise in the world, and for the reason that there is no other public work possessed of such a munificent franchise and fair prospects for future endowments.

Dr. Fowlkes will shortly issue, we understand, an address to the stockholders and the public, presenting in detail the facts connected with the condition of the enterprise, its prospects, and what he designs to accomplish.—*Marshall Republican*, Sep. 9, 1859.

COMMERCE OF GALVESTON.—We find in the *Galveston News*, of the 10th inst., its annual statement of the commerce of that city. The receipts of cotton for the last year sum up:

At Galveston..... 150,016 bales.
Matagorda Bay and at Sabine Pass..... 42,046 "

In all..... 192,062

Receipts at the port of Galveston:

Years	Cotton, bales.	Sugar, hhds.	Molasses, hhds.
1854.....	82,140	4941	7773
1855.....	59,609	5378	7504
1856.....	90,298	7370	8663
1857.....	71,399	124	575
1858.....	116,328	505	3626
1859.....	150,016	8028	7553

The exports of cotton from Texas for the year amounted to 193,306 bales, of which 46,623 bales to Great Britain; 7865 to France; 23,036 to other continental ports; 34,934 to New Orleans; 47,223 to New York; 28,324 to Boston; 2600 to Mexico by land; balance to other unimportant ports—leaving on hand and on shipboard, not cleared, 2655 bales.

Cotton crops of Texas since 1848:

1848.....	39,774
1849.....	38,227
1850.....	31,405
1851.....	45,900
1852.....	62,433
1853.....	57,790
1854.....	100,325
1855.....	80,730
1856.....	116,078
1857.....	89,899
1858.....	149,247
1859.....	192,062

The total exports from Galveston for the year are valued at \$9,000,000. The number of vessels that arrived at that port is 495, showing a large increase over that of the previous year. Of the crops in Texas the *News* says:

While we are glad to find that fair crops of corn and small grain have been secured, we regret to state that cotton has been cut short in many places and that sugar cane is at this time suffering for want of moisture. We apprehend that notwithstanding the increase of cultivation, our crops of cotton and sugar will not be larger than last year, unless favored by the most propitious weather for the balance of the season.

RAILWAYS AND LOCOMOTIVES IN GERMANY AND FRANCE.

We extract the following interesting items from that excellent paper, *The Engineer*, published in London:

Six hundred and Sixty miles of railway were opened in Germany in the year 1858, an extent twice greater than that opened in 1857. The extent of railway lines opened in Germany (including Prussia and Austria) up to the end of 1858, was 7,360 English miles. Their cost has been £120,000,000.

The number of locomotives employed upon all the railways of Germany, including East Prussia, Posen, Hungary and Galicia, is about 2,850, of which 2,277 are of German, 301 of English, 190 of Belgian, 60 of American, and 22 of French manufacture.

Up to the time of a report made last year, the Northern Railway of France had 248 engines; the Eastern, 176; the Lyons, 200; the Orleans, 244; the Mediterranean, 68; the Western, 50; the Rouen, Havre and Dieppe lines, 94; the Rhone and Loire, 62; and the St. Germain, 26. Total, 1,168.

The number of locomotives which can be built yearly by the different builders is officially reported as follows: Cail, of Paris, 100; E. Gouin, of Paris, 72; Andre, Kœchlin & Co., of Mulhouse, 100; works of Le Creusot, 80; Budicour, of Rouen, 40; Cavé, 50; Clement Desormes, 40; and the workshops of the Orleans Railway Co., 34; making *five hundred and sixteen yearly*. Besides the Orleans, other railway companies produce from thirty to forty more engines yearly.

The greatest number of passengers at any time carried in one train, on a French railway, is reported as 1,296, on the St. Germain line. This railway pay its first-class engine-drivers £13 sterling per month, inclusive of premiums.

Copper Mines.—The Lake Superior *Miner*, furnishes the following information relative to mining matters in the Ontonagon district.

At the Bohemian's Piscataqua mine, the most eastern one now operating, they are working but two parties of men, one on the south side adit running north, which is now in some 100 feet; and the other, on the western part of the at the same point mined on by Mr. Dickinson, some years since. Here they are finding some copper, but have found nothing in the adit worthy of note.

The Toltec have but few men in the mine at present, their attention being turned mainly to explorations in the low lands near the plank road, where they hope to find the Minnesota formation. They have sunk three shafts, none of which have yet reached the rock, though the south shaft is down 40 feet, at which point they struck water and quick-sand, obliging them to abandon the point.

The usual show of copper is visible at the Aztec, though their mine force is but six contributors, two of whom have taken out some two tons of strong mass and barrel copper the past month.

The Adventure are not working a large mining force at present, though the the "pitches" are looking well and the stamp machinery continues to operate with entire satisfaction.

The Nebraska are taking some very clever little masses from 1500 to 2000 pounds weight from the slopes in their X level, and the vein is showing well in sinking from X to the XX level. The succession of copper courses know to exist on all the mining properties on the right, as above named, from the Nebraska on the West to Piscataqua on the East, each dipping at a greater angle from a perpendicular as they go south, will certainly yet lead to important discoveries in the future.

At the Superior, the first and second levels from the Flint Steel are still being driven West from the North and South line between these mines, the second or lower level having reached a distance of some 100 feet from the line. The vein is not large, averaging perhaps a foot in width, but its characteristics are those of the mines on that part of the range, and is now producing stamp and barrel copper, with occasionally a small mass, by way of variety.

At the Rockland, it may be truly said that "a change has come over the spirits" of holders. On Wednesday of this week, they raised some nine tons of mass copper, and from the amount still exposed in the XL level, they can do so for several days, and 700 feet of strong vein from East to No. 3, West of No. 1 shaft, will still be comparatively undisturbed. The mine is also looking well at several other points, so that no fears whatever need be entertained that her present net product of \$5000 per month will not increase, with the probable accession to the monthly product of copper.

THE TENNESSEE AND ALABAMA CENTRAL RAILROAD.—The friends of the Montgomery and Decatur Road will read the following from the Nashville News with interest, as showing the condition and prospects of the road between Nashville and Decatur:

The seventh annual Report of the Board of Directors of the Tennessee and Alabama Railroad Company to the Stockholders for the fiscal year 1858-9, has been politely laid on our table. On examination we find the road to have been most judiciously and ably managed. The gross earnings of the road for the year ending on the 30th of June, amounted to \$75,127.59, of which \$6,386.52 was for Company service. The total expenses for the year amounted to \$27,550.11, leaving a balance of nett earning 63 per cent. amounting to \$47,579.46; showing an increase of over \$20,000 when compared with any preceding year. The gross earnings per mile were \$2,400.85. The expenses per mile were \$1,052.29. The total number of miles run on the road were 57,951, and the total number of passengers carried on the road was 59,628. The number of passengers each day—average—was 463 136-100—The number traveling one mile was 132,302, the average distance traveled by each passenger was within a fraction of 19 miles; and the average amount paid by each passenger was within a small fraction of 76 cents.

The nett earnings of this road exceed those of any road to which our attention has been directed; and there can be no doubt that this fact is to be in a great measure attributed to the superior manner of its construction, and the careful manner in which its employees manage their department of its business. No accident to life or limb has occurred to any passenger, officer or employee on the road during the time it has been running, and no train has ever been off the track.

The report of the chief Engineer, A. Anderson, Esq., contains many valuable suggestions in regard to the Southern connection of this road, which we shall lay before our readers as soon as we can find leisure to adapt them to our columns. We congratulate the company on the prospect of an early completion of the road to Mount Pleasant—which will take place as soon as a remnant of iron not yet at hand, can be received.

The Central Southern Road which connects with it at Columbia, is progressing now in the direction of Pulaski, and has already entered the rich and populous county of Giles, and will speedily be completed to Pulaski; and in the course of a few months be running through to Decatur, Ala., where it intersects with the Memphis and Charleston Road.

This road is destined to be one of no little importance to Nashville, and our people ought to begin to appreciate its importance, in advance of its completion.—Mail.

AN INFAMOUS OUTRAGE!—The Track of the La Crosse R. R. torn up and a passenger train thrown off!—A dastardly and inexcusable outrage was perpetrated in Columbia county, by some unknown parties, Monday morning. The rails on a portion of the track of the Milwaukee & Minnesota R. R. (La Crosse) were stealthily removed, and the passenger train going west was thrown off in consequence, with the loss of one life, and considerable damage to property.

The person who lost his life was a young man named W. W. Mosely, baggage-master on the train, a steady and faithful man. What provoked the outrage, we do not know; but no possible excuse or provocation can extenuate the crime. If the parties who did the deed had aught to complain of, or any demand to make against the Company, there were ways and

means under our institutions and laws, of securing a hearing for their complaints and satisfaction for their demands. But this taking the law into their own hands and attempting to wreak their vengeance upon the Company, or compel it to grant their exactions by tearing up the track, and thereby periling the lives and property of innocent persons, can not be tolerated for one instant. The whole power of the State, if need be, should be unhesitatingly called into requisition, to ferret out and bring to instant and signal punishment the villains who were guilty of this atrocious crime. We trust that the people of Columbia will be the first to assist in this work, and thereby help to efface the stigma which such an outrage, if suffered to stand unrebuked, must cast upon that county.—Milwaukee Sentinel.

IMPROVEMENT IN CAR COUPLINGS.—We observe on some of the trains of the Cincinnati, Wilmington & Zanesville Road an improved arrangement for coupling cars that appears to be deserving of special attention. We have received, in relation thereto, the following letter from the road master of the line, and learn, in addition, that the new coupling is approved by the intelligent and practical superintendent of the line, Mr. Daniels:

LANCASTER, O., Oct. 4, 1859

I have examined a new and useful improvement in car couplings, invented by B. L. Mills and R. Carpenter, of Lancaster, Ohio, and patented July 5, 1859, which said coupling I have no hesitation in pronouncing a valuable improvement. Its construction is simple, and entirely dispenses with pins, so that in making a running switch the brakeman can uncouple from his stand on the top of the cars, without being necessitated to pass between cars and thereby endangering both life and limb. From its construction I am satisfied that the danger of losing part of a train (which frequently happens by the coupling now in use) is entirely obviated, this coupling being so constructed as to render it impossible to become uncoupled without the aid of the brakeman. Its strength and durability is equal, if not far superior, to the coupling now in use. In point of economy it is labor and time saving, in addition to its dispensing with the pins, which is no small item of expense on all railroads, pins being constantly lost, broken, or bent. The repeated injuries received, and loss of life produced in coupling or uncoupling with pins, are, by this improvement, completely provided against, so that no further argument in its favor is necessary to recommend it to the favorable notice of railway companies.

J. T. HAM,
Road Master C., W. & Z. R. R.

STREET RAILROAD BUSINESS.—WHAT ONE CAR HAS EARNED.—A single car was put upon the track of the Cincinnati Street Railroad Company, from Fourth street up Walnut to Ninth, and thence west, about two weeks ago, and we learn that the receipts since that time have averaged about \$45 per day. The lowest amount taken in any one day was \$39. Counting each passenger at full fare, the number carried would average about nine hundred per day.

The two Sundays that the car has been running, the receipts exceeded \$100 each, which would give an aggregate of over two thousand passengers each Sunday. This is for a single car, which, with \$45 daily average earnings, would give an aggregate yearly earning of \$16,425. Of course when the road is fully equipped, with cars running every five or ten minutes throughout the entire line, the aggregate earnings must be largely increased.—Enquirer.

MONETARY AND COMMERCIAL.

There is been no new feature developed in the Money Market during the week past. The payments for the fourth were quite heavy, but were promptly met, notwithstanding the stringency. Collections still continue to come in but slowly, although there has been a slight improvement on the previous two weeks. The tendency of the present condition of things is to curtail credits, and make business more reliant on cash.

The market for exchange is without variation, and we continue our quotations.

	BUYING.	SELLING.
New York Sight.....	$\frac{1}{2}$ prem.	$\frac{1}{2}$ @ prem.
Boston.....	$\frac{1}{2}$ prem.	$\frac{1}{2}$ @ prem.
Philadelphia.....	$\frac{1}{2}$ prem.	$\frac{1}{2}$ @ prem.
Baltimore.....	$\frac{1}{2}$ prem.	$\frac{1}{2}$ @ prem.
New Orleans.....	par.	$\frac{1}{2}$ prem.
American Gold.....	40@45 prem.	$\frac{1}{2}$ prem.

The Commercial of this morning says: An arrest was made of an individual, on the Louisville mail boat, this morning, on whom were found counterfeit fives on the Bank of Louisiana, very well executed, also twenties of the State Bank of Ohio, and tens on the Bank of Kentucky, the latter more easily detected on close examination, but all fair imitations of the genuine.

The N. Y. Courier & Enquirer, of Tuesday, says the Bank Statement for the past week shows a contraction in the four leading items, viz:

In Loans, a decrease of.....	\$1,178,000
In Specie, a decrease of.....	1,401,000
In Circulation, a decrease of.....	19,000
In Deposits, a decrease of.....	1,918,000

The specie reserve is now equivalent to 27 per cent. of the net deposits. Four of the Banks report over one million each.

The Foreign Exchange Market for this week's steamer is not fully settled. Some Bankers are ready to draw on London at sixty days, at 11 $\frac{1}{4}$; Commercial Bills of good credit, 109 $\frac{1}{2}$ @110 $\frac{1}{2}$.

The Stock transactions at the First Board to-day were heavy. The market is firm at quotations. Of State Bonds the sales in Missouri Sixes are again large, closing at $\frac{1}{2}$ advance. Tennessee, 88 $\frac{1}{2}$ @88 $\frac{1}{2}$; Virginia, 94 $\frac{1}{2}$; North Carolina, 97 $\frac{1}{2}$; Indiana Five per cents, 85.

We note an advance in Cleveland and Toledo Shares $\frac{1}{2}$; Pacific Mail $\frac{1}{2}$; and a decline in Michigan Southern Preferred $\frac{1}{2}$; Chicago $\frac{1}{2}$; Galena $\frac{1}{2}$; Delaware and Hudson $\frac{1}{2}$; New York Central $\frac{1}{2}$; Chicago and Rock Island Shares at the First Board sold at 6 $\frac{1}{2}$, but declined 1 per cent. in the afternoon.

RAILROAD BONDS DUE IN 1860.—The following debts of Railroads, and one Coal Company, a total of \$15,000,000, mature during the year 1860, and some of them are quite heavy in amount. We give the current market value of the bonds, so far as it can be ascertained, and the figures show to some extent the probability of payment at maturity, or a provision for them satisfactory to holders.

Name of Company.	Amount.	Per ct.
Boston and Worcester 6's, July 1.....	\$300,000	100
Bos., Concord and Montreal 6's and 7's.....	50,000	85
Cheshire 6's, July 1.....	522,450	95
Cleveland and Pittsburgh 1st 7's.....	800,000	64
Columbus and Xenia dividend bonds.....	70,000	95
Covington and Lexington income bonds.....	115,000	10
Eastern Income 6's Dec. 1.....	75,000	100
Hudson River 2d mort. 7's.....	2,000,000	95
Illinois Central Freedland 7's, Sept. 1.....	3,000,000	93
Indiana and Bellefontaine 7's, 1860-61.....	450,000	70
Michigan Central 8's, April 1 and Oct. 1.....	1,234,000	90
Michigan Southern 1st mort. 7's.....	993,000	70
New Jersey Central 1st 7's.....	550,000	100
New York and New Haven 7's.....	312,000	93
N. Y. Central 5 $\frac{1}{2}$ per cents, August 1.....	100,000	100
Pennsylvania Coal Co.'s 1st mortgage.....	600,000	...
Reading convertible and income bonds.....	3,411,000	91
Terre Haute, Alton & St. Louis 4th m.....	57,000	...
Total.....	\$15,239,000	

The New York Central 5 $\frac{1}{2}$ per cents were originally issued by the State to the Auburn and Rochester Road, since consolidated with others into the New York Central. A like amount is to mature January 1, 1861.

WATERTOWN AND ROME RAILROAD.—The following is a comparative statement of the earnings and expenses of this road for the month of August, 1858 and 1859:

	1859.	1858.
Passengers.....	\$14,268 17	\$13,321 64
Freight.....	14,415 34	14,535 69
Mail, etc.....	1,127 24	1,150 92
Total.....	\$29,810 75	\$28,908 25
EXPENSES.		
Maintaining Road.....	\$4,325 24	\$7,048 06
Repairs of Machinery.....	2,101 02	2,560 01
Operating road.....	8,574 18	10,674 58
Overcharges refunded.....	5 60	.....
Total.....	\$14,915 44	\$20,282 65
Net.....	\$13,895 31	\$20,282 65
	8,625 60	
Increase in 1859.....	\$6,269 71	

LOCOMOTIVE DEPARTMENT OF THE CHICAGO, BURLINGTON & QUINCY RAILROAD.

The result of the operations of this department for the month of July was as follows:

No. of Engines.....	60
Miles run by Passenger trains.....	21,938
" " Freight " 	24,580
" " Other " 	21,297
Total miles run.....	67,815
Cords of wood consumed.....	821
Tons of coal consumed.....	749
Pints of oil used.....	3,399
Pounds of waste used.....	2,664
" tallow " 	994
Paid labor for repairs.....	\$4,870
" for materials for repairs.....	5,350
Cost of oil, waste and tallow per mile run.....	.83
fuel, " " " 	7.91
repairs, " " " 	15.07
Paid wages of enginemen and firemen.....	7.47
Total cost per mile run.....	30.28
Miles run to pint of oil.....	15.57
" " cord of wood.....	53.03
" " ton of coal.....	38.06
No. miles run by wood-burners.....	29,288
" " coal-burners.....	28,527
Cords wood consumed by wood-burners.....	740%
" " coal-burners to fire up.....	81
Tons of coal consumed by coal-burners.....	749%
Average cost per mile for engineers, firemen, and wipers.....	6.47
do fuel for wood-burners.....	11.03
do fuel for pass'gr trains, wood-burners..	7.39
do fuel for freight, " coal ".....	14.34
do fuel for freight, " coal ".....	7.77

Wood is rated at \$4.25 per cord. Coal is rated at \$2.50 per ton on tenders.

One pound tallow is rated as one pint of oil. Oil in lanterns and headlights is included in the above.

Rebuilding, superinteneing, teaming and all expenditures for repairs, are included in cost of repairs. C. F. JAURIET, M. M.

RAILROAD MOVEMENT.—We learn that the Opelika and Oxford Railroad Company are making constant additions to the amount of stock subscribed to their enterprise. Since the session of chambers Circuit Court. Judge Richards obtained subscriptions to the amount of thirty thousand dollars. There is now one hundred and fifty thousand dollars' worth of stock taken—all solvent—and as soon as the amount can be raised to one hundred and seventy five thousand—which will probably be done before the Court adjourns—the Company will commence letting out contracts for grading. Our citizens will therefore perceive that this enterprise is no longer a "visionary fabric," but has become a literal reality in the determined purpose of its friends. Then, a little encouragement and aid from this locality, would certainly do much towards forwarding this important measure. Will not our capitalists, then, lend a helping hand to the good work, and thus aid in giving a permanent growth to our village, and a general increase to all the business, and agricultural interests of the community.—*Opelika Era.*

WILLIAMS' CINCINNATI DIRECTORY 1860.

OUR Canvassers are now engaged collecting information for the CINCINNATI DIRECTORY for 1860, (Tenth Annual Issue.) The Directory for 1860 will be greatly improved over any former issue. It will contain, in addition to Cincinnati, Directories of Covington and Newport, a complete list of Post Offices in the United States, and many other improvements. It will be issued on the 1st of January. Subscription Price will remain as heretofore, \$2.

C. S. WILLIAMS,
194 Walnut Street.

NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith
Branch of the Cairo and Fulton Rail-
road Co., Van Buren, Ark., Sep. 10, '59.

SEALED PROPOSALS for the graduation of the First Division of twenty miles eastward from Van Buren, will be received at this office until **Thursday noon, December 1st, 1859.** The work is divided into twenty sections of about one mile each, and proposals for either a part, or the whole of this Division may be made; but no bids for less than one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise. Estimates of work done will be made on the first day of every alternate month, and payments made on the first day of the month following; and fifteen per cent. of all estimates will be retained until the completion of the contract. Contractors desiring other terms of payment may bid accordingly, as the above terms are not positively settled.

The Company having a large amount of the finest Lands in Western Arkansas, will give preference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications may be seen, and all desired information obtained, upon application at the Engineer's Office, in Van Buren.

JESSE TURNER, President.

NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith
Branch of the Cairo and Fulton R. R.
Co., Van Buren, Ark., Sep. 10, 1859.

SEALED PROPOSALS for the Masonry of the First Division of twenty miles eastward from Van Buren, will be received at this office until **Thursday Noon, December 31st, 1859.** No bids for less than the amount of Masonry upon any one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise.

Contractors will state terms of payments, and proportions of money, stock and lands, and amount to be retained by the Company to secure the completion of the contract. The Company reserves the right to reject any and all bids at its option.

Plans and specifications may be seen, and all desired information obtained on application at the Engineer's Office, in Van Buren.

JESSE TURNER, President.

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



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AND PANA OR SANDOVAL

FOR

Decatur, Springfield,
Bloomington, Peoria,
Burlington, Quincy,
La Salle, Rock Island,
Dixon, Galena,
Prairie du Chien, St. Paul, and
St. Anthony,
And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections. twice daily, at PANA for all the above points.

Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desires of making Quick Time, combined with comfort, should be particular and inquire for Tickets via

PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,

Gen'l Southern Agent, Cincinnati.

W. P. JOHNSON,

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CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.

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MOSELEY & CO.

June 21, 1859.

Cincinnati, Hamilton and Dayton



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LEAVE THE SIXTH STREET DEPOT DAILY

TRAINS RUN THROUGH TO RICHMOND, LIMA, SANDUSKY, AND DELAWARE WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND NORTH-WESTERN CITIES.

(Columbus time, which is seven minutes faster than Cincinnati.)

6 A. M. EXPRESS TRAIN—For Cleveland and Pittsburg, via Delaware, makes close connection at Crestline for Pittsburg, Baltimore, Philadelphia, and New York; and at Cleveland for Dunkirk, Buffalo, Boston and New York. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 7:20 P. M., Quincy and Galena at 7 A. M. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Munice. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

8 A. M. MAIL TRAIN—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STEAMER FOR DETROIT; at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at DELAWARE with the C., C. and C. Road, for Cleveland and points East. Also connects with Junction Railroad at Hamilton for Oxford.

4:30 P. M. TRAIN—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Also, connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago. Also connects with Junction Railroad at Hamilton for Oxford.

6 P. M. TRAIN—For Dayton, Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 8 A. M.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; at the new Ticket Office on West side of Vine street, between the Post Office and the Burnet House; or at the Sixth Street Depot. D. McLAREN, Superintendent.

W. HARVEY, INVENTOR AND PATENTEE,
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T. WRIGHTSON, AGENT. Cincinnati O.

PROSSER'S PATENT
ORIGINAL LAP-WELDED
IRON AND STEEL BOILER TUBES,
SAFE FROM END TO END.

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ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

SOLE IMPORTERS.
PROSSER'S PATENT SURFACE CONDENSER for high pressure steam, with sea or other bad boiler water, gauges, 3-cutter drills, counter-sinks, tube end cutting bars, expanders, tube scalers, steel wire and whalebone brushes, pull lever wrenches, tubes—plain or enameled, screwed together for Artesian Wells, Hollow Slabs for various purposes, Steel for Rollers.
THOS. PROSSER & SON,
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MANUFACTURERS OF
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AND
TIRES,
For R. R. Cars & Locomotive Engines,

ARE PREPARED TO
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FOR THEIR
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EITHER SINGLE OR DOUBLE PLATE,
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WHEELS FITTED
To Hammered or Rolled Axles,
In the best manner, at the shortest notice, and on the
Most Reasonable Terms.

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CONTAINING

A Complete List of Post-Offices in the United States and Territories, arranged by States and Counties; A Complete List of all Distributing Post-Offices; Rates of Foreign and Domestic Letter Postage; Rates of Printed Matter, Transient and Regular; Abstract of the Laws and Regulations of the Post-Office Department, &c., &c.

COMPILED BY E. PENROSE JONES,
Late Assistant Post-Master at Cincinnati.
Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.

U. S. BLANK AGENCY, CINCINNATI POST-OFFICE, }
January, 1859.

This work has been carefully compiled and corrected by E. PENROSE JONES, Esq., late Assistant Post-Master of the Cincinnati P. O., from the Records in this Department, and other sources, and contains the most complete list of Post-Offices especially of the Western, North-Western, and South-Western States, yet published.

MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an active pamphlet of about 100 pages. The entire matter is kept standing in type, and as the compiler is promptly advised of all New Offices, Changes and Regulations of the Department, the information is corrected up to the last day of publication, an advantage possessed by no other work of the kind.

OBSERVE. That this list is arranged by States and Counties, making it especially valuable to business men. No similar arrangement has been published since 1856. There are 3000 more offices in this than in any book heretofore issued. The Price is one-half that of any work of the kind now published.

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Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being ALIKE ON BOTH SIDES, impossible to ravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

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TRABER & AUBERY,
7 Public Landing

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172 Elm Street, bet. 4th and 5th,

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Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions. Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded McGowan's Patent Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855—1

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co., Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase—
Ag. 4, m.6.

FREEDOM IRON COMPANY,

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods,

Bar of all Sizes,

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Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't.

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works. June9.

New Time Table

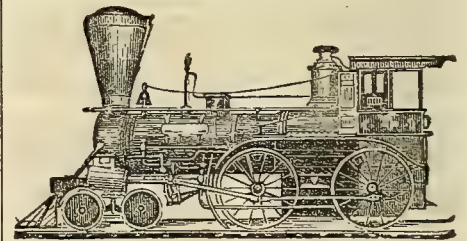
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	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp.	7.00 A. M.	7.00 P. M.	7.00 P. M.
Mail	9.00 A. M.	12.50 A. M.	
New York Exp.	11.15 A. M.	9.00 P. M.	9.00 P. M.
Night Exp.	5.00 P. M.	4.00 A. M.	4.00 A. M.
Utica Accom'n.	6.00 P. M.	Ar. U. 10.00 P. M.	
N. Y. Mail	11.15 P. M.	10.00 A. M.	10.00 A. M.
	Leave Buffalo.	Leave Bridge.	Ar. Albany.
New York Exp.	5.15 A. M.	5.15 A. M.	3.30 P. M.
Steamboat Exp.	8.00 A. M.	8.00 A. M.	8.00 P. M.
Mail			2.30 P. M.
Cleveland Exp.	6.00 P. M.	6.00 P. M.	4.40 A. M.
Cincinnati Exp.	11.00 P. M.	11.00 P. M.	8.30 A. M.
Utica Accom'n.			10.00 A. M.

CINCINNATI
LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.
ap.20 MOORE & RICHARDSON.

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DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of **Col. E. W. MORGAN**, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

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Address the Superintendent, at "Military Institute, Franklin Springs, Ky.," or the undersigned.

P. DUDLEY,

President of the Board

Jan 5th.

The Railroad Record.

E. D. MANSFIELD, } Editors.
T. WRIGHTSON, }

CINCINNATI:
Thursday Morning, Oct. 13, 1859.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

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A square is the space occupied by *ten lines* of Nonpareil.
One square, single insertion, \$1 00
" " per month, 3 00
" " six months, 12 00
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" " per month, 10 00
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" " per month, 25 00
" " six months, 100 00
" " per annum, 200 00
Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

The Georgia State Railroad has paid into the State Treasury for the year ending September, the sum of \$402,000, over and above expenses.

Passengers at New York, from Nicaragua, state that M. Belly's grand scheme has completely collapsed.

DUNKIRK TWENTY MINUTES FOR DINNER!

The above is a piece of information that should have been given at the door of every car of an Express Train on the Lake Shore road one day last week, and which was neglected to be given by some person who had it in charge. The result was that some forty people in the car in which we were, after waiting and wondering why the train stopped so long, just found out the reason in time to realize that a few others had got their dinners, and they would have to ride to Cleveland before they would have another chance to eat. Some were badly disappointed, and all felt they had been neglected.

We have ridden enough over the Lake Shore Road to know that these things are generally attended to, but on the occasion in question were omitted, probably, by accident. We would, however, remind the conductors, that hungry travelers think a great deal of a chance to get a good meal. And are rarely so well posted in the time tables as to know when the train stops for that purpose without being told.

THE VINTAGE.

WINE AND THE WINE CROP.

We have occasionally treated of Agriculture and Horticulture, as they stood connected with the great interests of the country. On a former occasion (*vide* Vol. II., page 855,) we gave an extended statement of the culture and products of the Vine in Ohio. The return of another good crop, and the general interest taken in this subject, render it proper we should take another view of the Vine Culture. Since then (1854) thousands of acres of the Vine have been planted, and more wine, by far, will be made, than has been in any one year. In this year, as we shall soon see, not less than a *million of gallons of wine* will be made in Ohio. Conceding that there is to be a good crop, but once in two years, it is, nevertheless, quite certain to be a profitable business, and its results rise to the importance of a large interest. We shall proceed to show what the Vine culture is in other countries, and how it has grown in our country, especially in this State; in what districts it is likely to succeed, and how far it has succeeded.

1. THE VINE CULTURE OF MODERN EUROPE.
In this country, where the Vine has heretofore made but small figure, in our products, we have little idea of the important part it plays in Europe.

The following were the Statistics of the Grape Culture in Europe, for the year 1828, the latest of which we have reliable statistics. It is taken from a table prepared by Von Malchus, Minister of Finance, in Wurtemberg:

	Vineyards—in acres.
Netherland.....	7,500
Prussia.....	54,000
Saxony.....	10,000
Nassau.....	34,130
Waldeck.....	500
Wurtemberg.....	78,340
Baden.....	112,000
Bavaria.....	545,718
Austria.....	4,162,500
France.....	6,425,200
Spain.....	1,500,000
Portugal.....	375,000
Switzerland.....	120,000
Italy.....	6,000,000
Greece.....	60,000
Aggregate.....	19,384,688

Here is a surface nearly as large as the State of Ohio, covered with grape vines. If we supposed this ground produced an average of one hundred gallons per acre, which is probably less than the fact, then we have the enormous quantity of 2,000,000,000 gallons of Wine annually. This is equal to eight gallons for each man, woman, and child in Europe. Hence, we can see why it is a cheap and common drink. France, Austria, Spain, and Italy, are the great wine countries; for, although the Vine is grown throughout Germany—the northern part, such as Prussia, Hanover, Westphalia, etc., are unfitted for the profitable production of Wine. The Vine will grow far north of the point at which Wine ceases to be made. In our former article (Vol. II., page 853,) we stated that good wine

requires a temperature of 67° in Summer. That can only be obtained in a moderate, uniform climate. In Europe, the line of demarcation is a variable one, from 38° 42' Lat. at Lisbon, 46° 20' on the Caspian Sea. With in even this line there are districts where the Vine will not grow to perfection. In the United States the limits of Wine making is a narrow one. We shall now proceed to this point.

2. AMERICAN WINE REGION.—The earliest wine making was in the Atlantic States; but, it is almost entirely given up there, and has advanced rapidly only in the Ohio Valley and California. The present wine districts of any importance are in their order. 1. The Ohio Valley. 2. The Missouri region, near the Merrimac. 3. North Carolina, (Western.) 4. California. In the Ohio Valley, the section which will really produce good wine is a very small section, of which Cincinnati is very near the center. From present experience, it extends to the Scioto East, to the Falls of Ohio West, fifty miles in the North, and perhaps, as much to the South. At any rate, no considerable amount of wine is raised out of this limit. In this section, there are about three thousand acres under culture, which at the average of this year (about three hundred gallons to an acre,) will produce 900,000 gallons of Wine. Four-fifths of this are in Ohio, and as there are in this State some other sections not in this, and as some of the Ohio vineyards are much more productive, it is possible 1,000,000 of gallons of Wine for Ohio, is not too high an estimate. In our former article we referred to the vineyard of Robert Buchanan, Esq., and we shall do so again. Mr. B. has now *seven acres*, and the wine making is over. This vineyard has produced 4,100 gallons of Wine—or nearly 600 gallons to an acre. This is the largest vintage for the last five years; the three last crops being almost failures. We shall repeat here the produce of Mr. B.'s vineyard for a series of years:

In 1848.....	2 acres....	530 gallons.
In 1849.....	3½ ".....	935 "
In 1850.....	3½ ".....	1,638 "
In 1851.....	4 ".....	630 "
In 1853.....	6 ".....	5,040 "
In 1854.....	6 ".....	845 "
In 1859.....	7 ".....	4,100 "

We do know what the four intermediate crops were, but they were small. If they were absolutely nothing, the averages of eleven years will give 250 gallons per acre. Seven acres give, therefore, 1,750 gallons. The cost at the utmost calculation is \$960. The proprietor of seven acres averages, therefore, an annual profit of \$790 (the price being assumed at \$1 00 per gallon) on a capital of \$2,646, (for the cost, vines, and culture of an acre comes to \$378 per acre.)

That is, the profit of making wine, at \$1 00 per gallon, is thirty per cent., even when four successive crops have been lost; but this is a thing which will rarely happen, perhaps not again in a generation. Such is the present

aspect of the culture of Vines around Cincinnati.

The prospect in Missouri seems quite as good, perhaps, better.

We extract from a correspondent of the *N. Y. Tribune* the following account of Missouri Wine Culture:

"The good situations for vineyards, he states, cost from \$1 to \$5 an acre; those which are already improved, \$15 or \$20. It needs three or four years' preparation before a vineyard pays its cost. During this time the vine-grower can support himself by farming and other work. Still, to succeed, each new immigrant should have some \$200 or \$300 capital to build his wine cellar and house, buy his cattle and pay extra labor. After three or four years, the vineyard will yield on an average from 250 to 300 gallons of wine to the acre; a very favorable site has been known to produce 1,000 gallons, and 400 was the lowest Mr. R.'s place had given. One man, with industry, can manage five acres. The wine is worth from \$1 25 to \$1 35 per gallon, so that \$400 an acre is a common return. Mr. R. had sold his wood on the place the first year for \$300, and had received one year 400 gallons from half an acre. It will be seen at once that no other agriculture of the United States presents such returns. Of other expenses, the wages of labor are now from 75 cents to \$1 a day, or \$12 to \$15 a month; a cow costs from \$18 to \$20; a pair of oxen \$45 to \$50; a horse, \$60 to \$70. Wood is worth about \$2 50 a cord; potatoes, 10 cents a bushel, and wheat 50 cents. Labor is always in demand, and, as may be seen from the prices of food, is exceedingly well paid. The best varieties of vines he had found to be the North Virginia Seedling, Catawba, and Isabella."

This is unquestionably too favorable an account. If the vines yield 250 gallons per acre, in a series of years, it is as much as they are likely; and if the wine bring \$1 00 per gallon, when the quantity is much increased, as it will be, it is as much as can be expected. But, we agree with the writer, that no other branch of agriculture is like to yield so large a profit for many years to come. Catawba Wine can be sold profitably at 50 cents per gallon, and at that price, all that can be made will be consumed. As yet, vineyards are planted on very small pieces of ground; but in time more capital will be employed, and immense quantities of wine made.

STOP-OVER PASSES.—In riding over the Cleveland, Columbus and Cincinnati Railroad a day or two ago, we saw posted in the cars the following notice:

CLEVELAND, COLUMBUS AND CINCINNATI RAILROAD.—Conductors will not be allowed to give Stop-over Tickets or Passes to Passengers having tickets purchased at any station on this line.

G. S. FLINT, Superintendent.

A ticket agent of another road sitting by us remarked that he feared a gentleman who had purchased a ticket of him the day before, would be badly disappointed in the application of the above rule. We thought then that such information as the above could be readily given through the columns of the railroad papers, and be generally seen by Agents much more readily than by any other means. And we would invite Superintendents and Agents to furnish us such pieces of information as they may desire to make known. In this manner they may facilitate their own wishes and keep others duly posted.

A GOOD MOVE.—The Pennsylvania Central Railroad managers have addressed the following circular to the General Ticket Agents of all connecting roads:

GENERAL TICKET DEPARTMENT,
Penn. R. R. Co., Philadelphia.

General Ticket Agent:—

SIR: The Pennsylvania Company has made arrangements to convey passengers and their baggage free of charge, between the New Jersey Railroad Ferry and the New York and New Haven R. R. Depot, at New York, on and after this date.

A similar arrangement has existed for a long time at Philadelphia.

You will, therefore, please insert in any tickets you may issue in future over this line to New York or points east of it, an "Omnibus Coupon," reading, "from the Pennsylvania Railroad Depot to the New York Ferry, or to a Hotel in Philadelphia," and in all tickets to points east of New York, via New York and New Haven Road, another "Omnibus Coupon," similar to the ensuing:

[Here follows form of Coupon for all tickets by Pennsylvania Central Route, entitling passengers to free carriage, as above.]

Through checks for baggage are also prepared—to go into operation at the same time—by which passengers holding through tickets to Boston and other Eastern points, can have their baggage re-checked on the cars before reaching Pittsburgh, and thus conveyed through to its destination without additional trouble to the passenger.

This will do away with much of the annoyance to which passengers are subjected in going from one landing or depot to another, and will do much to annihilate that most outrageous of all pests—"runners."

COVINGTON AND LEXINGTON R. R.

In a communication from JOHN T. LEVIS, Esq., President of the Covington and Lexington Road, in relation to the recent sale of that property—a sale that received the hearty approval of the citizens of Kentucky with few exceptions, and of sound railroad men everywhere—he says:

By an examination of the two annual reports made to the stockholders by myself, as President, November, 1857 and 1858, you will see that the exact condition of the road was placed before them; and when the last report was made, there was collected the largest meeting of stockholders ever present at an annual meeting. The meeting was called at the Company's office, but adjourned to the court-house for want of room. It was called

at 10 o'clock A. M., and adjourned at 10 P. M. This meeting was before any suit was commenced, but after notice that one would be commenced very soon; and not one word of censure was heard that the Directors had been unfaithful to their trust. Besides, they were all re-elected with little or no opposition. At that meeting the following resolutions were passed:

Resolved, That a Committee of five members of the meeting be appointed, who are instructed to inquire into and report (after conference with its creditors,) the best course, in their opinion, for this Company to pursue in reference to its affairs.

Resolved, That the holders of the first, second, and third mortgage bonds, and the income and guaranteed bonds, be severally and respectfully requested to appoint committees to confer with the committees of this meeting upon the subject referred to them.

The Chair appointed the following named gentlemen as the committee under the first resolution: Judge Kinkead, of Covington; Col. Benton of Covington; Judge Carr, of Fayette; Caleb Walton, Esq., of Harrison; and Judge Samuel, of Bourbon.

The Committee was selected from gentlemen along the line of the road, from each county represented by the stock of the Company. They organized and worked faithfully and energetically to effect a settlement with the creditors, but unfortunately without accomplishing anything.

You have made special reference to Harrison county. That county, as well as the other counties along the line of the road, was represented by able and accomplished gentlemen, in whom their constituents have the highest confidence, and they were again returned by the stockholders after their examination, and if the great fraud mentioned was committed, they were participants therein.

I am adverse to all newspaper controversy, but justice to the Directors and myself renders this communication necessary.

FORTY-FIVE MILES OF RAILROAD IRON.—We have been shown a letter, received by Smith Simkins, Esq., from Col. Houston, dated New York, Sept. 4, in which the latter gentleman states that he has purchased thirty-five hundred tons of American railroad iron for the Pensacola and Georgia Road. It is to be delivered immediately. He has also purchased three first class locomotives, together with chairs and spikes for the entire road. This iron will lay about forty-five miles, or, to very near the Sawannee river.

Col. Houston thinks the balance of the iron required, can be had by the time it is needed, and expresses the opinion that the road will be completed to Lake City by the middle of next year.—*Family Friend*.

THE CENTRAL ROAD.

The growing importance of the Central Road is daily more and more felt by the people. We have a great number of enterprises in Texas, but of them all, yet in operation, the Central Road is that which claims precedence. It does the carrying trade of the whole country, and as every new mile is opened its business increases most rapidly of any of the roads. This road was first opened after a four year's constant labor and struggle by its projectors in August, 1856, when twenty-five miles were put in operation. So great were the difficulties incident to the work, so numerous the obstacles that rose up in its progress, added to the pecuniary embarrassments of 1857, that the next twenty-five miles were not put in operation till the latter part of June, 1858, or nearly two years. On the 28th of July, 1859,

the third twenty-five miles were completed, making now seventy-five miles done from the city of Houston, and taking it into Brazos county.

The distance to the various towns of importance which will probably be connected with the Nevasota depot, for the present, is approximately as follows, in direct lines:

Anderson, Grimes Co.....	10 miles.
Huntsville, Walker Co.....	40 "
Wheeler, Robertson Co.....	41 "
Madisonville, Madison Co.....	43 "
Crockett, Houston Co.....	73 "
Palestine, Anderson Co.....	100 "
Henderson, Rusk Co.....	144 "
Athens, Henderson Co.....	190 "
Centerville, Leon Co.....	63 "
Fairfield, Freestone Co.....	92 "
Springfield, Limestone Co.....	88 "
Marlin, Falls Co.....	76 "
Waco, McLennan Co.....	100 "
Corsicana, Navarro Co.....	118 "
Dallas, Dallas Co.....	165 "
Wardville, Johnson Co.....	165 "
Birdville, Tarrant Co.....	174 "
McKinney, Collin Co.....	190 "
Sherman, Grayson.....	220 "
Preston, Ark.....	240 "

The saving in distance traveled by wagons from each of these places to the points at which their wagons at present discharge, is in no case less than fifteen miles, and in some it is forty or fifty. It will at once be seen that the trade the road will do, must necessarily be immense.

Like all enterprises of this nature, the difficulties in its prosecution have been not those of nature only, but mostly those created by rival interests in the ownership of the work. Neither the stockholders nor Directors have pulled together with any good will until the present year. One misunderstanding has succeeded another, which, with any other men, than such as were determined to put the work through, would have stopped it long ago. But both parties have had this determination. At the present time, we believe every body connected with the company is satisfied.

The future progress of the work, will be it is expected, much more rapid than the past. At present, Mr. Bremond has a contract for 7½ miles on the fourth section, which he is to complete by the month of November. He will doubtless succeed in doing this, as he has a large force at work, and the iron is purchased. Beyond this 7½ miles there are five or six miles graded, on the Adams contract. The country on is somewhat better adapted to the easy building of the road, and, no doubt, a contract will be made on favorable terms, at an early day to push it a head.

Those who have heretofore so liberally subscribed, doubtless seen to their satisfaction that their money has been applied in good faith to the work, and will be ready to lend it still further aid. The income of the road, though good, is not enough to meet the expense of construction at the rate of twenty-five miles a year as the law requires. The use of bonds in construction can only be made at a sacrifice. It would be much better for the stockholders to double their subscription at once. If this could be done, it would put the work so far along that the income each year would build the section required, till the whole is completed.

The work is a great one. It ought to have the help of the whole people, and we trust it may. To the enterprising men whose hearts are in its rapid progress we say, God speed. May they live to see the reward of all their labors.—*Houston (Texas) Telegraph.*

CATAWISSA, WILLIAMSPORT AND ERIE R. R. COMPANY.

The accounts of the Company for the fiscal year closing the 31st day of August, 1859, are herewith presented, as well as those of the year closing August 31st, 1858, a synopsis of which is as follows:

The receipts for twelve months ending August 31, 1858, were.....	\$271,664 74
Operating expenses, including repairs to Machinery and Track, Taxes, Damages and Office charges.....	141,724 98
Less rental of connecting roads.....	\$129,939 76
	48,468 65
Net receipts for year ending Aug. 31, 1858....	\$81,471 11
Gross receipts for year ending Aug. 31, 1859..	\$337,257 71
Operating expenses, including Repairs, Track, Machinery, Taxes, Damages and Office charges.....	187,006 78
Less rental of connecting roads.....	\$150,250 93
	59,812 46
Net receipts for year ending Aug. 31, 1859....	\$90,438 47
do do 1858....	81,771 11
Increase about 11 per cent.....	\$8,967 36

It will thus be seen that the net results of the past year's business, show an increase of 11 per cent., and it is believed this ratio of increase, will be exceeded during the ensuing twelve months.

Yet in the present condition of the Company's affairs it is deemed most prudent to predicate any proposed reorganization on a future net revenue of one hundred thousand dollars, which the managers feel no doubt may be safely calculated upon.

The present funded indebtedness of the Company consists:

1st. Of first mortgage 7 per cent. bonds.....	\$1,500,000 00
2d. Of chattel mortgage 10 per cent. bonds..	380,000 00
3d. Of second mortgage 7 per cent. bonds.....	\$500,000 00
Of which there is on hand.....	160,963 34—
4th. Of unsecured bonds 7 per cent.....	38,500 00
Of unsecured bonds 10 per cent..	14,000 00—
	52,500 00
	\$2,271,536 38

In addition to the above there is a large floating indebtedness of the Company as follows:

1st. Owing for labor and materials.....	\$69,892 72
2d. Bills payable, guaranteed by officers and Managers of the Company.....	132,845 33
3d. Loans and judgments guaranteed by officers and Managers of the Company.....	18,310 66
4th. Dues for running connecting roads.....	15,985 81
5th. Unsecured indebtedness, or secured by insufficient collateral.....	\$103,596 92
	\$340,631 44
The outstanding overdue coupons and interest amount to.....	\$95,596 61

It is manifest the present earnings of the road will allow of the payment of no such sum as the annual interest on all this indebtedness; that the attempt to do so in the disastrous condition of the industrial interests of our State and of the country generally, the past two years has proved a failure; and that with every exertion that has been made by those having charge of the company's affairs, no other course has been found practicable than to come to a full stand, to propose an early reorganization of this whole indebtedness, on such an equitable basis as will secure to the various interests the full share, that each is entitled to in the property and profits of the Company.

It will be observed that the floating indebtedness is of two classes—that wholly unsecured, and that which, without any consideration, has

been indorsed by the officers and managers of the Company, for the sake of carrying on its business, without paying exorbitant rates of interest in the market.

The latter we beg to submit has an equitable claim on the property of the Company, and on the consideration of the First Mortgage Bondholders. Their property has been preserved, and increased, large sums have been paid them in interest when not fully earned, in order to avoid the calamity of suspension, and the attendant confusion of conflicting interests.

Among the most sacred debts of the company, are the claims for labor and material furnished for the operation of the road.—These, in every such case, it has been usual to pay out of the earliest receipts; and, in fact, it is essential to the regular running of the road, and the safety of its structures, that this should be done. Through the wild regions in which our road is located, it would be dangerous to attempt to move the daily trains, were injustice done to those who have faithfully served the Company, or furnished it with materials, trusting to its good faith to provide for their payment.

Then there is the undoubted claim of the Chattel Mortgage Bondholders, to the machinery and rolling stock of the road. The First Mortgage Bondholders claim of course the first security on its real estate: while the lower mortgage and the unsecured bondholders and creditors, as well as the stockholders, occupy more remote positions in any equitable claim they may enjoy in the property.

In view of all the difficulties attending a proposed reorganization of the Company, it was deemed most prudent to place its property in the hands of an officer of the Court, pending the settlement of the various conflicting interests, and the managers concluded, therefore, to offer no opposition to an application for the appointment of a Receiver.

In making this appointment, on petition of one of the Bondholders, the Supreme Court were influenced by the decided wish, expressed in writing, by the holders of a very large amount of First Mortgage Bonds, including the New York representation, who desired that William D. Lewis, Esq., the former President of the Company for so many years, and a trustee under both the Mortgages, should be selected for that important and responsible position.

Among many advantages which his long familiarity with the Company's business would suggest, in favor of this appointment, there was this additional reason—that inasmuch as by the administration of all parties, an amicable foreclosure was necessary in order to reconstruct the Company's affairs, it would tend greatly to prevent conflicting interests, and to lessen the attendant expenses, if the various offices were united in one person.

Having, therefore, furnished the required security, Mr. Lewis, has entered upon his duties, and holds entire mortgaged property, real and personal, in his protection, from the destructive effects of separate litigation. He is charged by the Court, after defraying the running expenses of the road, with the payment of back dues for labor to the employees, and for material furnished to the Company.

The property of the Company consists of some 64 miles of railway, extending from the junction of the Little Schuylkill Road to the Sunbury and Erie Railroad at Milton. * * *

On behalf of the Managers,
THOS. KIMBER, JR., *Pres't*,
Philadelphia, Sept. 29, 1859,

The Dayton and Michigan, R. R. Co. have commenced the foundation of their Depot at Dayton.

AN ATTACK UPON THE SOUTHERN PACIFIC RAILROAD CO.

A communication appears in a late number of the Cincinnati *Gazette*, over the signature of "W.," the immediate design of which is to injure the Southern Pacific Railroad enterprise, but which has a covert object beyond this, and is intended to reflect injuriously upon the railroad interests of Texas generally. The anonymous character of this article is calculated to excite suspicion. A gentleman possessed of the pretended information conveyed in it, would have no motive for concealment, if the statements he makes were correct. But knowing they are false, and fearing exposure, he chooses to shoot from behind a masked battery.

The railroad policy of Texas was inaugurated in 1852, by the donation of eight sections of land to the mile, and in 1854, by granting eight additional sections, and providing for a loan of \$6,000 per mile. From the inception of this policy to the present time, the subject of these munificent donations—and this loan has been a theme of comment by the newspaper press throughout the Union—various official reports, for one purpose or another, have been made of the entire section of country embraced within the 32d parallel of latitude, describing the character of the soil, climate, productions, and topography. It has been explored under the direction of capitalists, with a view of determining the character of the route for a Railroad to the Pacific, and it is a notable fact, that the testimony has been all of one character, in regard to the fertility of the country, its capacity to hold a dense population, and the easy grade of railroads. And although nearly five years have elapsed, and the Southern Pacific Railroad has been assailed by the advocates of the rival routes, and by others, this correspondent of the Cincinnati *Gazette*, has been the first to discover, and publish to the world, that the public domain of Texas was comparatively valueless, that the country was ruined with drouths, that the loan to railroads existed merely in name, that the cost of construction would amount to upward of \$40,000 per mile, &c., &c., and other equally extraordinary statements.

We understand all this. We know the genus of W., and can personify him almost as clearly as if he had the indiscretion to place his name the conclusion of his communication. He is one the plunderers of the Southern Pacific Railroad Company, of which it had so many under its previous reckless management. We venture to say, further, that he is one of that class who have within the last twelve months approached Dr. Fowlkes with dishonorable propositions, and has been spurned and exposed by him; and that now, knowing that all hope of plunder is cut off, and governed by malice, seeks to defeat the enterprise by false and unfair representations—that he is, in a word, a "scamp," whose signature would furnish the most complete refutation of the statements in his article. This is evident when we come to review the character of his attack, which is intended to strike not only at the success of this enterprise but that of every other railroad enterprise in Texas, all of which rely upon cheapness of construction, the richness of the soil, the variety and abundance of production, and the capacity of the country to hold a dense population. When the character and motives of such men are exposed, they cease to do mischief.

We shall content ourselves with exposing the more prominent misrepresentations of "W." and when we have accomplished this task, we think the intelligent reader will sanction the

propriety of using our time more usefully than pursuing the subject farther.

The first misrepresentation is in reference to the loan to railroad companies. "W." says:

"Now let us see what this loan is. It is from the school fund of the State, a fund amounting to about twelve hundred thousand dollars only, being a fund to the State of Texas to pay her debts, (from the United States) in full. But Texas scaled her debts, and saved out of the money from the general government a large amount, of which the school money now on hand is a part. This fund will soon dwindle away. Other roads now in rapid progress will consume all this fund, except probably about one hundred and fifty thousand dollars, which the Southern Pacific Railroad Company may be able to borrow, yet this I doubt. The people of the State, doubting the ability of the Company to progress with their work, and its value when built, are very fearful if the Company should get any of their money, that it will be totally lost, will induce the Legislature, at its next meeting, to repeal the Loan Bill so far as this Road is concerned, which the Legislature has a perfect right to do."

And in the course of the same article, after slandering Texas, and abusing her people, her judiciary, and her government, he says:

"In Texas they can scale a debt or steal a road in the most workmanlike manner."

Never was there a more foul-mouthed libel uttered against a government and people. What are the facts? Texas came into the Union nominally owing a debt of ten millions of dollars. The most of the scrip constituting this debt was issued by the government at a depreciated value. After it was issued, it depreciated still further in value, and continued to depreciate, until much or the most of it was bought up at four and five cents in the dollar. Texas proposed to pay it all at what it was issued, and finally settled with the creditors at *seventy cents in the dollar*. All the debt for which she had received a full equivalent, she paid dollar for dollar, notwithstanding the Congressional debt bill which legally relieved her from doing so. What other country has ever paid her revolutionary debt so liberally? What other has been more liberal to those who have served her in the hour of need?

The school fund of Texas is made up as follows:

- 1st. The money for every acres of land taken up, goes to the common school fund.
- 2nd. There are \$2,000,000 of United States bonds laid aside for the same purpose.
- 3rd. One tenth of the annual revenue of the State.
- 4th. Four leagues of land to each county, amounting in the State to 500 leagues.
- 5th. Nine out of ten of all the alternate sections of railroad surveys.

Of the money in the treasury, one half is reserved for the railroads west of Trinity river, and the other half for those east of that stream. Of the fund reserved for the roads east of the Trinity, amounting to twelve or fifteen hundred thousand dollars, not a dollar has been drawn and before it is exhausted, we have reason to anticipate that, from the sale of lands and other sources of revenue, there will be an ample fund to meet the requirements of railroad companies. But two or three companies are competitors for this loan with any prospect of success, and not one of them, except the Southern Pacific, is likely to have any road completed under two or three years. There is nothing, therefore, to prevent the Southern Pacific Railroad, Company, under a vigorous prosecution of the work, from receiving the full benefit of the loan to the Trinity river; and if it should fail then, the resources of the company, will be amply sufficient to dispense with it. Had such men as "W." who have been plundering the company, and who have used the charter for purposes of speculation, continued thus to use it, there is no doubt an effort would have been made to get rid of them at any cost, and we think that all honest men will agree that the people and the government of Texas would have been justified in so doing. But there is no such feeling in Texas in relation to the company, now that it is happily rid

of such "dead heads" and "dead weight" with which it was incumbered.

Now, let us look at the character of the lands, productiveness, and increase of the population in Texas, and see how far facts justify the assertions of "W."

In 1846, Texas was admitted into the Union with a broad extent of country, but thinly populated. She had scarcely a navigable stream, worthy of the name, and until within a few years, not a mile of railroad. Notwithstanding these disadvantages, so rapidly has been the settlement of the country, that her population to-day is perhaps larger than that of the State of Louisiana, as shown by the returns in the recent State election, and approximating very nearly to that of Alabama. Before the expiration of another decade, she will be numerically, as she is in extent, the Empire State of the South. The increase of the aggregate value of taxable property in the State for the year 1858, over that of 1857, is estimated at about 8 per cent., (as will be seen by Richardson's Almanac,) and the increase of 1859 over the preceeding year, will be found in all likelihood greater. As evidence of the increase of population, at the last session of the Legislature, *thirty-seven new counties* were established.

Land scrip is not sold, as asserted by "W.," at fifty cents per acre, but is regulated as follows: Ordinary land scrip is sold at one dollar per acre, to be located upon the public domain generally. The alternate sections of railroad lands, to actual settlers, are disposed of at \$1.25; while to others they are sold at two dollars per acre. The foregoing is the exposure of a glaring misstatement by this correspondent. In selling her lands at these prices, Texas has pursued a policy designed to invite population, and promote the active settlement of the country.

The misrepresentations of "W.," in relation to the character of the country upon the 32d. parallel of latitude, is contradicted by the description of every one who has traversed it. A. B. Gray, in his elaborate report, gives a description differing in every essential particular, from that of this Cincinnati correspondent. General Rusk, whose veracity will not be questioned, explored this country in 1853, and represented that portion of it, most severely affected, as a fair average country.

The country between the eastern boundary of the State, and Fort Belknap, is equal to any of the same extent, in the South. From Fort Belknap to El Paso, a distance of 500 miles, is traversed by the overland mail. In relation to this, Richardson's Almanac says:

"It is certainly a remarkable fact that not a single failure has yet taken place under this important mail contract. If any proof could be sufficient to satisfy the world of the superior advantages of this route for a railroad to the Pacific, it should be such proof as this. Without scarcely any previous expenditures in opening a road through a vast and almost unexplored region, mail coaches are at this moment carrying mails and passengers a distance of 1475 miles, with actually greater speed than we have on a majority of the short lines within the limits of our own State. We look upon the successful establishment of this line as an event of far more than ordinary importance, especially to the people of Texas. The account given us by Major Wood, and which is corroborated by all other accounts we have seen, shows that nearly the whole route from San Antonio to San Diego is a fine stock raising country, capable of producing most of the necessities of life, while much of it is an excellent agricultural country, with but a small scope of barren or desert lands."

In addition to this, we present the following extracts from the report to the post-office department:

"The question is frequently asked as to whether we have a well defined road all the way from San Antonio to San Diego. To this I answer that it is as plain a road as any stage route over which a mail is carried in coaches for your department. An emigrant would find it impossible to miss his way when once on our road either going or returning from California, as he would be traveling in a country where guide posts marked every cross-road."

"A consultation of the items of my journey, where I have put down each day's advance, will tend to show the excellent condition of our roads, for we used coaches all the way from San Antonio to San Diego, sometimes drawn by six, never less than four mules.

"There are a number of formidable looking ranges of mountains upon all the maps, running across Arizona, north and south, which look to be barriers almost impassible without a great expenditure of time and money. Our road we found to be *through* rather than *over*, these mountains; although they appeared formidable at a distance, yet, on approaching, they generally proved to be isolated buttes, with our road winding around them by easy grades through the valleys, or else passing over some low span or saddle, no way impeding staging. These passes in the mountains seemed to be formed by nature on purpose for a road. The speed our coaches are making through these mountain ranges is the best evidence of their easy and expeditious passage. By my journal of August 25th it will be noticed that the speed we made from Cook's Spring, through the Sierra Madre mountains to and beyond the Mimbres river, was 21 miles in five hours; through the other mountain passes we made much the same rate of speed.

"Having formed my ideas of mountains and mountain road from a pretty extensive experience among the Sierra Nevada of California, I was very forcibly struck by the fact of not meeting a regular chain of mountains all the way from San Antonio, until I reached the coast range of California, eighty miles from San Diego. I wish to call particular attention to the distinction between ranges of mountains like the Alleghenies and Sierra Nevada, and the system of isolated buttes scattered over portions of our line, and around which we pass by valley roads well adapted to speed. The mountains south of the Gila, and its immediate neighborhood, do not interfere with our road; they come up close to the river in many places, but leave an ample passage way for our road around the bases. These mountains are mostly what the Mexicans term *Mesas*; high hills, flat on their tops. It appears as if the plain had formerly been level with the tops of the hills, some hundreds of feet higher than it is now. This same appearance of *Mesas* is now found along the Pecos."

"Wood, water and grass are the emigrant's necessities in crossing our continent. Over our route we have enough of these for all purposes of staging or emigration."

"An examination of my table of distances will show no want of water along the route; all my measurements are to and from well known watering places."

"As for grass, the country through which our road runs is unequalled as a grazing country, in the opinion of practiced men acquainted with the subject.

"Our present road would be called a superior one in any State for thirteen hundred miles of its length, and a fair road the remainder of the distance, save twenty-one miles of sand in the Colorado desert."

"In the valley of the Rio Grande I had an application from an old mountain man, who wanted a situation as guide. This man had trapped beaver in all the principal streams falling into the Gila and Colorado rivers."

"I had a good opportunity of knowing the nature of the climate we have to contend with. Leaving San Antonio in August, and going directly through, I passed over the road in the hottest months of the year. Then, leaving San Diego October 23d, and spending nearly three months returning, I experienced the winter weather over the same country. It was very warm in San Antonio in July; but when we had once commenced ascending to the table lands of Texas, the heat became comparatively moderated, with nights particularly pleasant. In going down the Gila, where we were descending toward the level of the sea, the heat was very great, so much so that, for comfort, having a full moon, we traveled by night and lay by during the middle of the day. In my experience of the heat on the Gila, which looks so formidable, as marked by the thermometer, I suffered much less with that instrument indicating a hundred and over, than I have suffered in the Atlantic States with the thermometer at eighty-five or ninety. The air was pure and clear, the heat produced a copious perspiration, and gave no feeling of oppression in breathing.

"In my plans for returning across the continent, the recollections of the hot days along the Gila, or on the Colorado desert, never present themselves to me as any serious inconvenience. The heat does not oppress animals any more than it does men.

"In returning to San Antonio, through Arizona and Texas, I experienced the northers a number of times, having been delayed once by snow; but none of our party ever suffered anything more than the natural annoyance incidental to wet feet and damp blankets.

"At El Paso, December 9th, we received advices of the northern wagon road expedition having returned for the winter. I consulted Col. Leach, superintendent of the El Paso and Fort Yuma wagon road, as to his movements; he assured me he had no intention of going into winter quarter, but on the contrary, should continue on the road through the winter months; in fact he deemed them the best suited to his purposes of shortening and improving the road."

These extracts not only contradict the statements of "W." but the show conclusively, to every unprejudiced mind, the superiority of the Texas route over all others.

It is a well settled fact that all the country from the eastern boundary of the State, to the Colorado, a distance of 500 miles, and the country from the Pecos west, will admit of a dense population. The country from Fort Belknap west, is said by those who have traversed it to be the finest grazing country in the world. The worst country is from the head of the Col-

orado to the Pecos river, and even a great portion of this is represented as fine for grazing and stock raising. Water from 12 to 20 miles is procured from common wells on the overland route, and at these points, stage-stands are kept.

According to the Report of the Commissioner of the General Land Office, the area of the State of Texas is estimated at about 175,000,000 of acres. Of this amount, nearly seventy-three millions have been located; leaving one hundred and two millions of vacant land. It is perfectly ridiculous to state that out of such a vast body of land, the Southern Pacific Railroad will be unable to select eight millions of valuable land.

Of the 250,000 acres already located, Mr. Wickland, the surveyor, and others who have seen them, give the most flattering account. Mr. W. has repeatedly stated that if the work upon the S. P. Road was rapidly progressing, these lands should be worth at least \$5 00 per acre. His official report to the Company of the situation and character of these lands, is exceedingly interesting. We give one or two extracts, showing the estimate he places upon them:

"The surveys of the Southern Pacific Railroad in Milam District, with few exceptions, are certainly among the best locations ever made in this State. The fertility of the valley lands, is second only to the heavy bottoms of the lower Trinity and Brazos rivers. The soil varies from the black waxy to black sandy, and chocolate color; and is as well adapted to the growing of cotton, as for the production of small grain. The great depth and fertility of the soil precludes the necessity of any manure, and the same crops may be produced year after year on the same lands. The valleys are thickly timbered with musquite, post-oak, live-oak, walnut, pecan, and elm of the best quality. In fact, the best timber of this kind I have ever seen in Texas, is to be found in this section of the State. Chains of hills containing plenty of excellent sandstone, naturally shaped for any desirable purpose, enclose the valley. The hills are steep, with a narrow base, and do not cover much ground. They are covered with a dense growth of first rate post-oak, black-jack oak, and other kinds of timber, and present the best range for hogs, etc. The creeks and branches contain always plenty of good water, from the sources of their confluences with the clear Fork of the Brazos. Hubbard's creek, near its mouth, is larger, and affords more water than the clear Fork itself. The drouths of late years have not affected this country much. In the popular saying, 'It stands the drouth well.' This is caused by a substratum of clay a few feet beneath the surface, which retains the moisture. This is no exaggerated or fine drawn picture of the country, but a truthful description, and will be found so by every one acquainted with the country. Capt. John S. Ford located his Ranger's camp at the mouth of Hubbard's creek, and his corps speak with pleasure of the delightful country. I assert, without fear of contradiction, that this country affords a better range for cattle, horses, sheep, and hogs, than any other part of Texas. As an evidence of its productiveness, I will state that Mr. Preston, who lives two miles above the mouth of Hubbard's creek, obtained this Summer two hundred and twelve bushels of wheat from seven bushels planted, without taking any particular pains in cultivating or threshing it."

The foregoing description applies to 43,762 acres of the Company's lands. It does not comport with the cheerless account of "W."

Mr. Wickland describes the succeeding survey of 20,840 acres as follows:

"The main Conche river, from fifteen to twenty feet wide, flows through the block and divides a beautiful valley from six to eight miles wide; numerous running branches, all skirted with good timber, supply nearly every survey with pure spring water. The prairies on each side of the stream are rich and undulating."

The description of the next block of 46,080 acres, is equally attractive, and concludes as follows:

"This section of country is susceptible of dense settlement. For pastoral and agricultural purposes, it can hardly be surpassed. The Conche rivers are beautiful streams of clear, pure water, from ten to thirty feet, and below their junction, forty feet wide. There is in some places considerable fall. These streams are capable of turning a great amount of machinery. The elevated lands dividing the principal water courses are broken, but afford a superior range for innumerable herds of cattle, horses, and sheep. The United States mail route for California runs up the main Conche river, and crosses block No. 10 of the Company's lands."

The succeeding block of 77,954 acres is thus described:

"This body of surveys includes nearly an uninterrupted musquite prairie. The quality of soil is excellent, varying from a chocolate color to dark red loam, in some places, with

a slight admixture of gypsum. Limpid springs and streams of pure water everywhere abound."

"There are numerous salt springs along the northern banks and tributaries of the river, containing quite or nearly pure common salt, and strong enough to yield a large per centage. The hills to the south of this block contain plenty of lime and sand stone for the construction of any sort of building or masonry."

We could continue the description of these lands, but the already extended length of this article admonishes us to hasten to a conclusion. They are all equally interesting and valuable. Suffice it to say that these representations of Mr. Wickland, while they show the character of the Company's lands, comport in the description of the country with that of Gen. Rusk, Col. M. T. Johnson, the Report to the Postmaster General, and of every individual who has gone through Texas to El Paso.

"W.'s" account of the navigation of Red river is equally inaccurate. But this is a matter of small consequence, for if it were as bad as he represents it, the Company would not be injured by it.

He is equally at fault in relation to the Vicksburg, Shreveport, and Texas Railroad. Competent engineers have decided that this road will be one of the easiest constructed and cheapest in the South, notwithstanding the heavy expense of bridging Red river and other streams.

The charter of that Company is an exceedingly liberal one, and munificently endowed. The work is progressing rapidly, and, under the contract, has to be completed by 1866. When finished, there will be nearly a continuous line of railroad to Charleston.

Will the Southern Pacific Railroad pay? Will the stock be valuable or worthless? These questions are easily answered. The road will run through the heart of the most productive and valuable portion of Texas. It has no navigable streams to compete with. It will command the trade, on either side, for a hundred miles, of a country capable of sustaining a dense population. Such a road, in immediate communication with the Mississippi river, it seems to us, must pay, unless sadly mismanaged. The value of the stock depends upon the rapid construction of the road; for if rapidly constructed, the road will cost less than under tardy management, and the Company will have the advantage of the best selections of lands.

The great value of the Texas land grant is forcibly presented in a report of Dr. Fowlkes, from which we make an extract. He very appropriately says:

"The production and growth of cotton is a monopoly of climate. It cannot be successfully cultivated, except between the latitudes of 30 and 35 degrees; extending from the Atlantic to the Pacific Oceans,—a region of the earth's 240 miles in width and 2,000 miles in length. Much of this region is incapable from sterility and other causes, to profitably cultivate this staple. It follows as a necessary consequence that as the amount of cotton lands diminish the remainder are rendered more valuable.

"The production of cotton is not only limited by climate and the amount of land within this area, but it is also controlled by the peculiar character of labor by which it can be profitably cultivated. As no product of the earth will more largely reward this species of labor, the servile population by which it is cultivated must be ultimately concentrated within the cotton producing region. The natural increase of this labor, however, cannot meet the demands of production, influenced by the march of civilization, and the increasing population of the world. In other words, the consumers of cotton increase at an enormous rate, while the labor producing it can only increase in proportion to the natural increase of the servile laborers. By the necessary laws of supply and demand, the prices of cotton must advance. And as the lands are worn out or fail to yield the present supply, the fresh land will be taken up. They will be thereby diminished in quantity, and consequently increased in price. Wealth and population will follow the fresh and more productive sections of country in which they are situated. The land grants of this Company constitute, therefore a source of wealth and power never before possessed by any other enterprise in this or any other country."

In addition, Dr. Fowlkes, in his Report, calls attention to the rich mines of gold, sil-

ver, lead and copper to be found on this route, and the effect of their successful development in aiding the construction of the S. P. Railroad, and in enhancing the value of the Company's lands.

To say that an enterprise, possessing such advantages, and with such a munificent donation, is likely, under proper management, to prove a failure, is to assert what no man of common sense will believe. Whether the Federal Government will lend its aid to the construction of this or any other railroad to the Pacific, remains to be seen. That assistance will be given in some shape or other, is the opinion of almost every intelligent man in the country, whether in Congress or out of it. Certain it is, the country demands a railroad to the Pacific, and may believe that two routes will be selected. Such a road is regarded as a national necessity. And if assistance is to be given, what other enterprise will invite it more cordially than the route over the 32d parallel of latitude? To assert that the claims of this route will be ignored, is to suppose that Congress will disregard topography, climate, convenience, and cheapness of construction.—*Texas Republican*.

TUNNEL UNDER THE ALPS.

It is generally known that the immense work of boring a tunnel under the Alps, between Modane and Bardoneche, was commenced some months since; but we have now to record some interesting facts which might, perhaps, never have been discovered, but for the peculiar methods employed in this colossal operation. Modane and Bardoneche are situated on opposite sides of the Alpine chain which divides Piedmont from France, and precisely at a point where the valleys of the Arc and the Dora, which lie nearly on the same level, run parallel to each other, and the mountain is narrowest. The thickness of the intervening mountain is thirteen kilometres in a straight line; the actual tunnel will be 22½ kilometres. It is designed in the same vertical plane, but, to facilitate drainage, is somewhat higher in the middle than at the orifice, so as to form gentle slopes on both sides,—one not exceeding an inclination of five per thousand, and the other being twenty-three per thousand, in consequence of a difference of level between the two extremities, the numbers being, Bardoneche (southern orifice), 1,324 meters; culminating point, 1,335 meters; Modane, (northern orifice,) 1,190 meters above the level of the sea. The crest of the mountain being 1,600 metres above the culminating point, the sinking of shafts, which is the method generally employed in order to begin boring tunnels at several points at once, was out of the question; hence the tunnel could only be worked at its extremities, so that the labor by the ordinary processes, could not be accomplished in less than thirty-six years. Then, how was a depth of gallery of three or four kilometres, and having but one orifice, to be aired? These were all serious obstacles. MM. Elie de Beaumont and Angelo Sismonda having examined the mountain geologically, found it to contain micaceous sandstone, micaceous schists, quartzite, gypsum, and limestone—all easy to blast, the quartzite alone excepted; but the stratum of this is not likely to be very thick. The other difficulties alone, therefore, remained; and these were at length overcome by three Sardinian engineers,—MM. Sommeiller, Gratton, and Grandis,—who proposed to turn the abundance of water for which the locality was remarkable to account, by applying it to a peculiar system of perforation and ventilation,

which we will now endeavor to explain. The first apparatus imagined by these gentlemen consists in a hydraulic air-condenser, which is a syphon turned with its orifices upward, and communicating by one of them with a stream of water, by the other with a reservoir of air. The water, descending into the first branch, enters the second, and by the pressure it exercises, condenses the air, which is then forced into the reservoir. This done, a valve is opened, by which the water contained in the syphon is let out, and the operation recommences. The emission and introduction valves are regulated by a small machine operating by means of a volume of water; and the air in the reservoir is maintained at a constant degree of pressure by a column of water communicating with a reservoir above. Thus, with a water-fall twenty meters in height, the air is condensed to six atmospheres, equivalent to the pressure of sixty-two meters of water. This condensed air is used for two purposes; first, as a motive power, then for ventilation. Two kinds of perforators, worked by condensed air instead of steam are employed,—one invented by Mr. Bartlett, the other by M. Sommeiller,—and the manner in which these machines perform their duty affords the first practical demonstration of the possibility of employing compressed air as a motive power with advantage. By means of these perforators, holes for blasting may be bored through the hardest sienite in one-twelfth of the time which would be required if ordinary means were employed. In order to understand the importance of this result, it may be stated that, in tunneling, three-fourths of the time is employed in boring holes, and the remainder in charging and blasting; hence, accelerating the former operation is an immense advantage. The perforators have another advantage: in a place where three couples of miners could hardly find room, eighteen perforators may be easily set to work; so that, by these ingenious contrivances, as well as by others for clearing away the rubbish, the perforation of the tunnel may be effected in six years, instead of thirty-six. The air that has been employed as a motive power, is used to feed the gallery; but when the latter shall have reached a considerable depth, it will require 85,924 cubic meters of air per twenty-four hours to replace that which has been vitiated by respiration, torches, and gunpowder; and this quantity in the form of 14,320 cubic meters of air condensed to six atmospheres, the reservoir can furnish. A new and curious fact has been observed during these works, viz: that when the air, condensed to the degree above mentioned, is shot into the gallery from the machine, any water happening to be near the latter suddenly congeals, although the ambient temperature be about eighteen degrees, centigrade (seventy-two degrees Fahrenheit). Hence, when a large mass of compressed air is driven into a gallery situated at 1,600 meters below the outer surface of the earth, and where, consequently, the temperature must be about 100 degrees Fahrenheit, the dilation of the compressed air produces a diminution of temperature sufficient to counterbalance the excess alluded to. The progress now making per day in boring is three meters on each side of the mountain, or six meters per day in all.—*Mining Chronicle*.

The Lehigh Valley Railroad has been obstructed by several slides, and the tressel work at Allentown is endangered so that the trains can not pass. The East Pennsylvania Road has been injured, and the embankment washed away at Millerstown.

TRADE BETWEEN BELGIUM AND THE UNITED STATES.—The following has been translated from the *Moniteur Belge*, June 24, for the *New York Herald*:—

Schemes are now elaborating at the same time in the United States and Belgium, to establish, on a new basis, commercial intercourse between the two countries, and to accelerate and give it more extension.

1. Direct exportation to Belgium of the cotton, tobacco, &c., from the place of production in the Southern States.

2. Organization in those same States of fairs of the products of Belgian manufactures, appropriate to the consumption of the market and sale of those products. These are the two principle bases of the combination patronized in the United States by the association of the Georgia planters, and in Belgium by a central committee, which, after several preliminary meetings, has definitely organized.

In its first meetings the committee has especially discussed that part of its programme about the fairs and sales of the Belgian manufactures in the United States.

A series of resolutions has been adopted, and an expedition of manufactures will be made this year as trial. An appeal will be made to the manufacturers of the country.

The committee has communicated those resolutions to the government.

The government can but applaud the efforts made for the extension of the Belgian trade and industry. In a general point of view, and without assuming any kind of responsibility as to the operations and their results, the government has answered that the committee can rely on its sympathy and its warm desire to favor the success of the enterprise, by all means that it may judge practicable. The aid of our agents abroad has also been promised to the committee, and a delegate has been appointed to follow the labors of the committee.—*Hunt's Merchants Magazine*.

TEE EMPIRE OF CZAR AND A PROSPECT FOR THE CELESTIALS.

NAPOLEON BONAPARTE is said to have remarked that Europe would become either Cossack or Republican; and the present difficulty between China and France and England presents fitting occasion to review the Cossack or Russian influence. Besides the United States of North America, there is not an other instance in historical record of so sudden and wonderful a growth of any realm as that of the Russian Empire. Few persons are ignorant that, scarcely more than a century has elapsed since PETER THE GREAT the founder of that Empire, ruled over a wide and uncultivated country, filled with semi-barbarous hordes of nomadic people, destitute of any marks of civilization; indeed, over the whole area—from the White to the Black Sea—the character of the inhabitants was little, if any, superior to the South American Indians of Peru or Chili. But the indefatigable industry of the individual PETER roused the whole race, from the Ural Mountains to the borders of the Baltic, and the nation seemed to commence a march from the regions of barbarous ignorance toward a condition of cultivation and enlightenment.

This national improvement in every department of agriculture, mechanism, commerce and society did not suffer at the hands of the succeeding monarchs. Paul was quite worthy of his predecessor, and Catharine, notwithstanding some individual obliquity of conduct, brought an intellect to bear upon the affairs of that Empire, which, for power, clearness, and far-sightedness, was as vigorous and masculine

as that of her predecessors, and under her sway the increase and progress of Russia were truly surprising. Under the reign of Alexander I, arts, science and manufacture advanced with marvelous strides, but under the dominion of Nicholas the advance of the Empire was unparalleled. Never, save in America, did so colossal a fabric rise in the dark places of the world, and, like the often obscure birth of genius, spring into beauty like a flower from a marsh. Not alone did this national illumination progress from Finland to the Crimea, but, passing into Asia, it penetrated the cold and cheerless wastes of Siberia, a land hitherto chiefly known by the sight of the exile, and yet, through the instrumentality of Nicholas' indomitable energy, Siberia has opened upon the Northern world a line of cities and towns all the way across the Asiatic continent, a thrifty agriculture has overspread all the European portion of the Empire, and the region of the Black Sea has become the grand granary of the Eastern world; while from the hitherto sterile realms of hyperborean Asia a new industry and energy made the cold soil yield rich harvests during the short, yet fervid summers; and beneath the hitherto broad wastes thousands were employed in mining, and masses of mineral wealth, in wondrous variety, were brought up to the day. Within half a century not alone the coarser metals, but gold and diamonds have made the slopes of the Ural and Altai richer than Golconda.

Thus has a desert been changed to a land of agricultural and mineral production of the most important consideration, while the Empire itself, under the masterly military organization of Nicholas, has been continued through Alexander the reigning Czar; and while every part of the vast domain of Russia has been developing its resources in agricultural, mineral and mechanical departments, a high order of military organization has been kept up, the powerful character of which, for scientific efficiency, was exemplified in the Crimean War.

Thus, while new towns and cities have burst from Russian forests, and grain fields have steadily spread out toward the White and Black Seas, mines have been opened and leagues of marshes drained; an energetic enterprise has laced the land with railroads, and the locomotive now

"Flies like a shuttle through the loom of trade,"

from St. Petersburg to the extreme south of the Empire; while, grandest of all the steps of advancement made by this mammoth of monarchies, is the recent general act of emancipation, which has shaken the shackles from the wrist of every serf in the realm of Russia.

Thus quietly but powerfully has this gigantic power of the North been progressing and extending its strength in a manner that has seemed to have escaped the observation of the remainder of mankind. Let us look at the map of Europe, and we will find Russia marching over the whole Northern Continent, save Sweden and Norway, sweeping in Finland and Lapland; and stretching over the Ural Mountains, from the heart of Asia to the Arctic Ocean, we find her arm extending to Kamtschatka; and, almost unknown to the civilized world, an immense trade and commerce have been opened by her in the region of Eastern Asia, along the Amoor River, where a new Empire, as it were, has been colonized. Nor does the Pacific offer a barrier to the giant progress of this mighty Empire; but, reaching across the water, the Czar lays his hand on the American Continent, and stretching from Bebring's Straits, down by Alaska and far inland, the marvelous picture is presented that, upon the map of the world, the whole globe is belted around beneath the

Arctic zone, in three continents, by the unbroken dominion of the successor of the Casars and representative of the Romanoffs.

When we contemplate that this broad band or belt encircles the world, and look upon its resources, we can but be amazed. Consider for instant its vast fisheries; its forests, its mines of salt and metals, its enormous agricultural products, its legions of inhabitants and the results of their mechanical and personal labor, the footing which they have obtained in the scale of military nations, and the almost fabulous increase of late in their naval equipment, we can not behold Russia with other regard than of wonder and amazement; and we make no hesitation in saying that, if France and England become embroiled in a war with the Chinese, the Russian Government will be upon the Yellow Sea with a powerful fleet, and a strong land force will be quartered about the locality of the Amoor River; and whatever may be the issue of the war, the doom of the Chinese dynasty will be sealed; and whenever it is, the Czar will be the person who will control Chinese Tartary and all the country south of Siberia, and we should not be at all surprised if the day should arrive when the Cosack power of which Bonaparte spoke shall preside at Pekin.—*Cincinnati Enquirer*.

BUSINESS PROSPECTS.

The past has not been a profitable year for business at large—railroad, shipping, stores, dwellings, agriculture, commerce in many respects, at the West, California and other places, and most manufacturers have not done a profitable business. Most of these interests have barely paid their expenses, and very many struggling to meet extended paper have sustained a style of living which has cut into their capitals in a manner to restrain enterprise. Although most leading products—cotton, sugar, breadstuffs, &c.—have been abundant, they have encountered a want of enterprise that has stagnated business and opposed a sort of glut to all attempts to realize. The new crop year now opens with all the elements of great prosperity, and if wise councils prevail in relation to China, a year of great recovery in the world at large may be looked forward to. The chief reason for the stagnation of trade now is that a very large portion of the active capital in the hands of enterprising men was paralyzed by the panic, and they have not yet emerged from their difficulties. Natural products are all abundant, but their money value not satisfactory. Singularly, the very abundance of wealth was an element of stagnation of trade, since it promised lower prices for the great food staples; and therefore prevented enterprise from embarking in that direction. The progress of the harvests in Europe is now said to be less satisfactory in point of quantity than was at first supposed, France it is stated that the crop will be 20 per cent. less than last year in quantity. The and as a consequence prices are firmer. In exports from France for the crop year just closed, 31st July, 1859, are as follows:

Imports of grain July 31, 1858, to August 1, 1859.....	hecto	3,055,396
Exports of grain, July 31, 1858, to August 1, 1859.....		10,050,783

Of the imports 500,000 hec. were from Algiers. These figures embrace all grains, but it has been a year of small exports to Great Britain. The average wheat crop of France is given at 70,000,000 hectolitres by M. Moreau Jones, and a diminution of one-fifth would be 14,000,000 hec., or 38,200,000 bush., an immense decline, and it is probably an exaggera-

tion. The best and most recent authorities give the results of the harvest as rather less than last year, when, as above, the surplus was 20,000,000 bushels exported at very low figures. The chances are, however, that with continued peace and reasonable industrial activity, stimulated by cheap money, that the consumption of food will be unusually large this year, and as a consequence that prices will rise towards its close. In the United States the crops of wheat are said to be very large, after a very short one. The new crop, therefore, comes into consumption much earlier than last year. Wells' Chicago Express remarks that the receipts at that port which have been since August 1, in wheat and flour 3,682,004 bush. against 2,454,369 same time last year—is almost exclusively of new crop, the old having been thoroughly exhausted. This is no doubt the case, and it proves that the new crop must supply 13 months' food, instead of 12 months. This demand upon the crop is equal to diminishing its extent 9 per cent., a very important item in favor of the producers, and may lead to greater confidence in the ultimate values. The corn crops do not answer the same expectation, and the supplies are less. The prices of all grains being less, it results that the amount of exchange furnished this year by the crops for the two months to the close of Sept. is much less than last year, and very far behind the previous one. The receipts of all grain at Chicago for the 8 weeks to Sept. 24, are 5,125,384 bushels against the 5,970,688 bushels last year. The value of the corn alone is \$1,400,000 less than last year, and of wheat and flour \$700,000 more, making a net decline of \$700,000 in the exchange for wheat by those articles from Chicago alone. The same facts apply in a greater or less extent to the whole North-West, and indicate the difficulty of realizing from that section. There has been much exchange furnished by sales of stocks—railroad and others—held at the West, and which the late rise in this market afforded a chance to realize on. So far the stock speculation was a commercial benefit, since it enabled Western stockholders to apply depreciating stocks to the payment of debts, at the expense of speculators. The progress of the year may produce a better demand for crops, and if anything like the prices that ruled prior to the panic last, which could not avert that evil, could be realized, a new period of commercial prosperity would dawn upon the country.—*Economist*.

DEATH OF MR. BRUNEL.—We learn by the *Circassian*, at St. Johns, that Isambard Kingdom Brunel, the eminent English Engineer, is dead. He was born at Portsmouth in the year 1806, where his father, the illustrious French engineer, who died in 1849, was engaged in constructing the manufactories of dock pulleys. While very young he was sent to France, where he was a student in the College of Caen, and on his return from in 1826, he was employed in the opening of the Thames tunnel. The irruptions of the water caused him to run more than one risk, especially in 1828, when over six hundred feet of water broke through the opening, and he was carried away by the force of the current and cast safe and sound upon the bank. In the year 1833 he was appointed Engineer of the Great Western Railway, and directed all the appliances of perfect art to that line and its branches, among which the bridges of Maidenhead, Chepstow, and Thamar may be named. To him also is due the suspension bridge from Hungerford, in London, one of the longest in England, as well as a part of the constructions

IMPORTANT METALLIC DISCOVERY.—One of the startling discoveries of the age has just been made, and its effect upon the commercial affairs of the world can not be foretold. We allude to the late discovery in the process of making or smelting of a new metal called the Byrne ore or Byrne metal, which has been named after the inventor. This new metal is of such a nature that either an imitation of gold or silver can be produced which would defy detection by more than nine-tenths of the dealers in wares manufactured of pure gold and silver. The most astonishing part of the discovery is that of its being so valuable as to be used in the manufacture of every article in which gold or silver can be used. This metal is being used now in the manufacture of watch cases, rings, pencils, forks, spoons, heads of canes, tooth-picks, pens, table-sets, chandeliers, and, in fact, everything in which gold and silver has been used heretofore; and when it is understood that this metal was sold in the manufactured state for two dollars an ounce, the immense revolution which it is destined to produce in the commercial world can be partially conceived. Its weight and general appearance are precisely like that of gold and silver; thus making it without doubt the equal of those metals in the manufacture of everything else but money, which use is made certain because it will not change its appearance by use any more than gold or silver will, and not so much when alloy to any great extent is used.

When we can buy service of plate made of a metal which represents gold in every particular, but its value for two dollars an ounce, while wrought gold is worth eighteen dollars an ounce, it is easy to perceive that a great revolution is about to take place in this branch of trade. In the silver ware, the difference of price is not so great. A set of silver spoons which costs now six dollars, can be bought, made of this metal, and which will represent the silver in every particular but their value, for two dollars per set. For our part we must say that this is the most astounding development that the world has ever known as regards its commercial arrangements. It surpasses the railroad and telegraph invention beyond a doubt, and may end in revolutionizing our whole system of money exchanges.—*N. Y. News.*

PROGRESS OF THE MEMPHIS BRANCH ROAD.—The *Clarksville Chronicle* says: "We took a trip on the railroad, on Tuesday evening last, in company with the President, Chief Engineer, and other distinguished dignitaries. The road is completed about ten or eleven miles, and we are sure we never traveled on a better or a smoother road. The whole of the road from this point to the State line will be finished, we suppose, some time next week, by which time, it is thought, the two passenger cars will be here. The masonry work on the Cumberland River bridge is progressing rapidly."—*Weekly Yeoman.*

WILLIAMS' CINCINNATI DIRECTORY 1860.

OUR Canvassers are now engaged collecting information for the CINCINNATI DIRECTORY for 1860, (Tenth Annual Issue.) The Directory for 1860 will be greatly improved over any former issue. It will contain, in addition to Cincinnati, Directories of Covington and Newport, a complete list of Post Offices in the United States, and many other improvements. It will be issued on the 1st of January. Subscription Price will remain as heretofore, \$2.

C. S. WILLIAMS,
194 Walnut Street.

NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith
Branch of the Cairo and Fulton Rail-
road Co., Van Buren, Ark., Sep. 10, '59.

SEALED PROPOSALS for the graduation of the First Division of twenty miles eastward from Van Buren, will be received at this office until **Thursday noon, December 1st, 1859.** The work is divided into twenty sections of about one mile each, and proposals for either a part, or the whole of this Division may be made; but no bids for less than one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise. Estimates of work done will be made on the first day of every alternate month, and payments made on the first day of the month following; and fifteen per cent. of all estimates will be retained until the completion of the contract. Contractors desiring other terms of payment may bid accordingly, as the above terms are not positively settled.

The Company having a large amount of the finest Lands in Western Arkansas, will give preference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications may be seen, and all desired information obtained, upon application at the Engineer's Office, in Van Buren.

JESSE TURNER, President.

NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith
Branch of the Cairo and Fulton R. R.
Co., Van Buren, Ark., Sep. 10, 1859.

SEALED PROPOSALS for the Masonry of the First Division of twenty miles eastward from Van Buren, will be received at this office until **Thursday noon, December 31st, 1859.** No bids for less than the amount of Masonry upon any one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise.

Contractors will state terms of payments, and proportions of money, stock and lands, and amount to be retained by the Company to secure the completion of the contract. The Company reserves the right to reject any and all bids at its option.

Plans and specifications may be seen, and all desired information obtained on application at the Engineer's Office, in Van Buren.

JESSE TURNER, President.

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—VIA—

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Dixon, Galena,
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St. Anthony,
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June 21, 1859.

Cincinnati, Hamilton and Dayton



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8 A. M. MAIL TRAIN—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STEAMER FOR DETROIT; at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at Delaware with the C. & O. and C. Road, for Cleveland and points East. Also connects with Junction Railroad at Hamilton for Oxford.

4:30 P. M. TRAIN—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Also, connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago. Also connects with Junction Railroad at Hamilton for Oxford.

6 P. M. TRAIN—For Dayton, Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 8 A. M.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; at the new Ticket Office on West side of Vine street, between the Post Office and the Burnet House; or at the Sixth Street Depot.
D. McLAREN, Superintendent.

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circular which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the repair is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our repairs stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet,.....	\$300 00
do do 350 ".....	335 00
do do 400 ".....	375 00
do do 500 ".....	450 00
do do 600 ".....	525 00
do do 700 ".....	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and rat reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, as now in operation in several States, apply to

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To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly paged, including all sizes, from the small memorandum book to the large Super-Royal and Imperial Ledger, and a variety of styles of workmanship, order of any design, with or without printed headings, and warranted to give satisfaction in quality of paper, ruling and durability of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

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Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, *Clarks' Memorabilia*, *Rollins' Dick's Works*, *Rollins' Ancient History*, *Plutarch's Lives*, *Josephus*, *Spectator*, *Chain of Sacred Wonders*, *Familiar Science*, *Webb's Monitor*, *Soden's German*, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

43 MAIN STREET, CIN.

W. HARVEY'S SAFETY JOINT For Coupling the Ends of "T" Rails. PATENTED, NOV. 2, 1858.

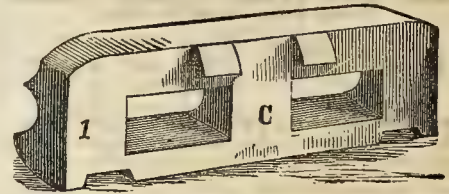


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

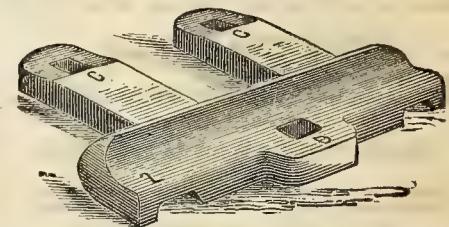
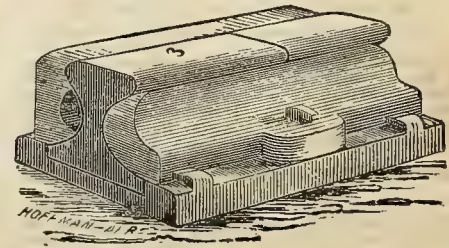


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues in slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that on one part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly safe road, thereby doing away with the breaking of rails, wheels, and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear of the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
41 Jefferson-street, Albany, N. Y.
T. WRIGHTSON, AGENT, Cincinnati, O.

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In the best manner, at the shortest notice, and on the
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This work has been carefully compiled and corrected by
E. PENROSE JONES, Esq., late Assistant Post-Master of the
Cincinnati P. O., from the Records in this Department, and
other sources, and contains the most complete list of Post-
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MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

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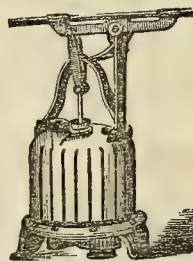
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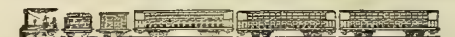
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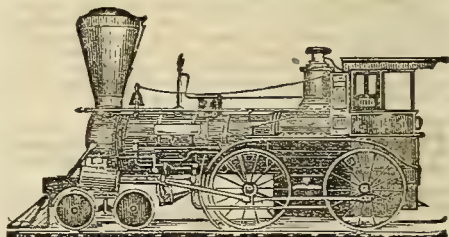
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	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
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Mail	9:00 A. M.	12:50 A. M.	
New York Exp.	11:15 A. M.	9:00 P. M.	9:00 P. M.
Night Exp.	5:00 P. M.	4:00 A. M.	4:00 A. M.
Utica Accom'n.	6:00 P. M.	Ar. U. 10:00 P. M.	
N. Y. Mail	11:15 P. M.	10:00 A. M.	10:00 A. M.
	Leave Buffalo.	Leave Bridge.	Ar. Albany
New York Exp.	5:15 A. M.	5:15 A. M.	3:30 P. M.
Steamboat Exp.	8:00 A. M.	8:00 A. M.	8:00 P. M.
Mail			2:30 P. M.
Cleveland Exp.	6:00 P. M.	6:00 P. M.	4:40 A. M.
Cincinnati Exp.	11:00 P. M.	11:00 P. M.	8:30 A. M.
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President of the Board.

Jan 5th.

The Railroad Record.

E. D. MANSFIELD, - - - - } Editors.
T. WRIGHTSON, - - - - }

CINCINNATI:
Thursday Morning, Oct. 20, 1859.

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Subscriptions and communications addressed to
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IF The European Agents for the *Railroad Record* are Messrs. ARGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

NEW YORK AND ERIE RAILROAD—ELECTION OF DIRECTORS.—On Tuesday last the election for Directors of this Road took place in New York. The scene was an excited one, and the vote much larger than is usual at Railroad elections. The whole number of votes cast was 52,287, of which the "yellow" or "administration" ticket received about 29,000, including 7,000, from which one or more names had been scratched. The annexed is the elected ticket: Samuel Marsh, Daniel Drew, Dudley S. Gregory, John Arnot, of Elmira; William B. Skidmore, Herman Gelpcke, Ralph Mead, D. A. Cushman, Ambrose S. Murray, of Goshen; William Evans, of England; George T. Cobb, Robert H. Berdell, William F. Splatt, of England; Nathaniel Marsh, J. C. B. Davis, Henry Sheldon, Henry L. Pierson. The new Board does not differ essentially from the old.

SAFE ROAD.—A gentleman who recently traveled over a certain railroad, declared his opinion that it was the safest road in the country, as the superintendent keeps a boy running ahead of the trains to drive off the calves and sheep!

COMMERCE IN ANIMALS.

INFLUENCE OF RAILROADS.

Within a few years, the transportation of animals to the markets of the Atlantic has been carried on, almost entirely, by railroads; and their influence, in this respect, has been most remarkable. Perhaps, in no one thing, have Railroads been more successful. In the old way of transporting cattle and hogs, the time required was so great, that the cost was great, on one hand, and the market entirely uncertain on the other. The grazer might drive a herd of cattle, and be forty miles on the road, thinking the price was what it was reported when he started, but find it very different, perhaps, to his benefit, but as often against him. The cost of forty days driving is also considerable. Now, cattle are taken in three or four days, and the drover knows just what to depend upon in the way of price. The effect of this change has been to increase largely the number of cattle transported on railroads, and the number also carried to the Eastern Markets. This whole class of business is taken from canals, steamboats and common roads, and done by Railroads. Another effect, and a very important one, is to give better prices to the Western cattle raisers; for, the reduction of freights is not taken off from New York prices, but is added to the first price of cattle. This is a curious, but almost universal effect of improved transportation. In fact, the rapid increase of town population causes the demand to be steadily pressing against the supply. There is, therefore, no opportunity for a fall in price, at the point of consumption. If the supply is gradually increased, by the transportation, it is met by increased demand. The reduction, on transportation, then, enures directly to the benefit of the producer, and the Western farmer has received all the advantages accruing from the beneficial effects of Railroads on the transportation of produce. In the reports of Railroad Companies for the State of Ohio, and returned to the Commissioner of Statistics, we have the number of animals carried over most of the roads.

The following is an exhibit of this traffic on the most important roads:

	Horses.	Cattle.	Hogs.
Pittsburg, Fort Wayne and Chicago.....	1,532	16,672	154,562
Cleveland, Painesville and Ashtabula.....	—	*116,874	*403,593
Cleveland, Colum. and Cincinnati.....	—	65,182	230,844
Cincinnati, Wilmington and Zanesville.....	—	*20,500	—
Springfield, and Mt. Vernon and Pittsburg.....	112	2,352	13,250
Bellefontaine and Indianapolis.....	—	19,910	39,860
Sandusky, Mans. and Newark.....	—	3,600	30,000
Indianapolis and Cincinnati.....	—	5,753	61,912
Ohio and Mississippi.....	—	3,388	66,430
Cin., Hamilton and Dayton.....	—	4,458	99,390
Little Miami, Columbus and Xenia.....	3,720	37,060	122,250
Central Ohio.....	—	3,325	*115,263
Aggregate.....	5,364	299,054	1,286,844

In the figures marked with a * the horses

and cattle in the second column, and the hogs and the sheep in the third, are mingled together. In the Wilmington Road, they are all mixed. Making allowances for this difference in two or three roads, we shall have the following aggregate of each class of animals carried on the railroads of Ohio:

Horses.....	8,000
Cattle.....	295,000
Hogs.....	1,000,000
Sheep.....	300,000

On this result, two or three comments are necessary, to a more perfect understanding.

1. The majority of horses are driven to Cincinnati Market,—which is probably the largest horse market in the United States. They are collected there from Ohio, Kentucky, and Indiana, in great numbers. Most of them, probably four-fifths, are driven, as the distance to be carried is not more than one-fourth that of cattle to the Eastern markets, and the horse is a fast traveler. The railroad transportation of cattle is, therefore, comparatively small.

2. The number above given does not, by any means, represent the exports of animals; for, many of the roads lead into other States. The exports of cattle and hogs are almost entirely represented in four roads, viz:

The *Painesville and Ashtabula*, which leads to New York.

The *Pennsylvania Central*, from Pittsburg to Philadelphia, which drains the Pittsburg and Cincinnati; the Pittsburg and Chicago, and partially the Indianapolis and Bellefontaine roads.

Next, the *Central Ohio and Marietta*, which send their freights to Baltimore.

There is, therefore, a disappearance in the exports of many of the numbers above given. They, nevertheless, represent a part of the freights carried on each of these roads.

The number of animals actually exported from Ohio, are nearly as follows:

Horses.....	8,000
Cattle.....	120,000
Hogs.....	340,000
Sheep.....	920,000

We are not now speaking of manufactured meats; but, only of live animals.

Looking to the export of manufactured as well as live animals, we exported the following amounts:

Cattle.....	150,000
Hogs.....	1,000,000

There were fully 700,000 hogs slaughtered in Ohio last year, and this, with the number of hogs carried over railroads to Eastern markets, makes more than a million.

3. The freights furnished by the animals above enumerated, were:

Cattle.....	150,000 Tons.
Hogs.....	100,000 "
Sheep.....	15,000 "

Total..... 265,000 "

This is a very large item in Railroad traffic.

4. There is another operation, connected with the export of animals, which is very im-

portant, and quite curious. It is the habit of nearly all the cattle merchants to draw bills on the East for the most of the purchase money. It will be safe to say, that the commerce in animals, is the basis of Inland Bills of Exchange to the amount of two-thirds the value of cattle exported. If this be so, Cattle Bills on the East, must amount to \$5,000,000 per annum. This is a very profitable and safe branch of Bank business. It is nearly all done, by the Banks of Chillicothe, Columbus, Lancaster, Athens, Zanesville, and Marietta. These Bills are generally discounted, at four months, and frequently renewed, when the sales of stock have been delayed, or the payments on time; but, they are almost invariably paid, and by the addition of exchange make much more interest for the Banks, than ordinary discounts.

The business of exporting cattle and hogs, and transporting them on railroads is likely to increase, rather than diminish, and continue to be a lucrative business for all parties engaged in it.

The following were the numbers of cattle and hogs in the principal States of the West, in 1850, and they have probably increased since:

	Cattle.	Hogs.
Ohio.....	1,358,947	1,964,770
Indiana.....	714,666	2,263,776
Illinois.....	913,076	1,915,907
Kentucky.....	752,512	2,891,163
Missouri.....	791,510	1,702,625
Tennessee.....	759,762	3,104,500
Aggregate.....	5,250,433	13,883,041

The number of swine, in these six States is equal to one-fourth of the whole number in Europe, and more than there is in any one country, except Russia. The cattle do not bear so large a proportion, but are more numerous than in any country of Europe, except Russia, Great Britain, Austria, and France. These States, however, have but one-third the population of Great Britain, and one-fourth that of France and Austria.

The proportion of animals, in the Vallies of the Ohio, Missouri, and Mississippi, is not likely to diminish. The animal food of a nation must be derived almost entirely from its interior and agricultural portions. From thence, it must be transported to the large towns, and great marts of commerce, where the millions are engaged in arts, trades, and manufactures. It is an interesting branch of commerce, in which railroads must continue to perform an important part.

—The following is a comparative statement of the business of the North Pennsylvania Railroad Company, for the month September, 1858, and 1859:

Earnings of September, 1859.....	\$32,774 07
Earnings in September, 1858.....	28,376 83
Increase.....	\$4,397 24
Earnings in ten months ending Sept. 30.....	\$280,844 07
Same time last year.....	239,136 14
Increase.....	\$41,707 93

RAILROAD MISCELLANY.

—We learn that the arrangement made with the officers of the Milwaukee and Horicon Railroad by a portion of the bondholders, by which the Company were to pay on account of arrears of interest, a certain sum of cash and the monthly earnings, has fallen through, and the bondholders are now left with no hope, but to commence proceedings of foreclosure, a course they were long ago advised to take. They will come in possession of the road sadly out of repair, and at a time when, for nine months at least, the earnings will barely pay running expenses. The management of this road presents only one out of many of the instances in which the credit of our Railroads has sustained damage not so much from the insufficiency of the earnings as the neglect to appropriate them to their proper use.

—The September earnings of the Macon and Western Railroad are:

Passengers.....	\$12,067 81
Freight.....	24,616 74
Mails, etc.....	838 50
Total.....	\$37,523 05
September, 1858.....	38,971 10
Decrease.....	\$1,447 25

—The Chic. and Rock Island Road received the first week of—

October, 1859.....	\$30,203
Same time 1858.....	23,122
Increase.....	\$7,081
Equal to 31 per cent.	

—The net earnings of the Watertown and Rome Railroad for August, were \$14,895 31, an increase of \$6,269 71 over August, 1858.

—The first week of October on the Michigan Southern gives \$47,200, a decrease of about \$2,000 on the same week of last year.

—The first week on the Cleve. and Toledo is \$17,477, against \$18,236 last year.

—The business of the Camden and Atlantic Railroad Company for the first eight months of 1858 and 1859 compare as follows:

1858.		1859.	
Gross receipts.....	\$102,221	Gross receipts.....	\$121,759
Expenses.....	52,103	Expenses.....	53,078
Net receipts.....	\$50,118	Net receipts.....	\$68,631
Increased net receipts in 1859.....			\$18,563
At the rate of 35 per cent.			

—The earnings of the Cincinnati, Hamilton and Dayton Railroad, for September, were as follows:

September, 1859.....	\$47,420 77
September, 1858.....	46,848 16
Increase.....	\$572 61

—The statement of earnings of the Buffalo and State Line Railroad for the months of September, 1858 and 1859, were:

1858.		1859.	
Passengers.....	\$52,341 30	Passengers.....	\$42,333 85
Freight.....	34,603 95	Freight.....	35,506 26
Other sources.....	3,274 17	Other sources.....	1,529 97
Total.....	\$90,219 42	Total.....	\$79,370 08
Increase in Freight.....			902 31
Decrease in pas'gers and other sources.....			11,751 65
Total Decrease.....			\$10,849 35

In "other sources," 1858, is included \$2,-124 17 miscellaneous receipts for the previous 12 months.

—The receipts of the Morris Canal have been:

Total to Oct. 1, 1859.....	\$216,723 88
Week ending Oct. 8.....	9,408 33
Total to Oct. 2, 1858.....	\$198,298 91
Week ending Oct. 9, '58..	8,878 28
Increase in 1859.....	\$17,955 02

—The quo warranto case of the Commissioners of Washington county, Pennsylvania, has been decided by Judge Gilmore against the Commissioners, affirming that the levying of a tax by the Commissioners on the county, to pay the interest on the Hempfield Railroad Bonds prior to the completion of the Road to Greensburg, was illegal. The levy was set aside. The case has been carried to the Supreme Court on a writ of error. The decision directly contradicts that of Judge Grier of the United States Supreme Court.

—The earnings of the Indianap. and Cincinnati road for last month will foot up about \$41,000. There are pretty strong indications that with the month of September the record of comparatively small receipts will cease, as the cause which has occasioned them will be removed. From October 1, 1856, until the following spring, the inward freights fell off. This year they will steadily increase during the corresponding period. Indeed, the movement has already commenced in good earnest, judging from what we observed at the Cincinnati depot yesterday, where the orders, by telegraph, for extra cars, were greater than could be filled. The country between Lawrenceburg and Indianapolis is literally filled with corn, and the country west and northwest of Indianapolis is also filled of that great staple. The turn of the Indianapolis and Cincinnati Company has come at last.

—The first week's traffic in October on the Michigan Central Road—

Gave.....	\$54,220 78
In 1858.....	54,764 11
Increase.....	\$56 67

This is much less than was anticipated.

—The business of the Baltimore and Ohio Railroad for September was as follows:

MAIN STEM.				
Passengers.....	\$73,709 41			
Mails.....	8,688 00			
Express.....	3,770 00			
Tonnage.....	253,922 38			
				\$340,069 79
WASHINGTON BRANCH.				
Passengers.....	\$31,413 02			
Mails.....	1,600 00			
Express.....	1,300 00			
Tonnage.....	6,767 04			
				40,480 06

N. W. VIRGINIA BRANCH.				
Passengers.....	\$3,948 09			
Mails.....	866 67			
Tonnage.....	14,771 93			
				19,586 69

Total.....\$400,136 54

	Main Stem.	Washington Branch.	N. W. Va.	Total.
Sept., 1859..	\$310,069 76	40,480 06	19,536 69	400,146 54
Sept., 1858..	337,449 18	44,757 97	13,582 43	395,789 53
Increase Sep. 30, 1859.....				\$4,346 96

—The following is the statement of the September earnings of the Hannibal and St. Joseph Railroad:

From Passengers.....	\$38,659 12
" Freight.....	32,152 75
Mail and Express.....	3,411 93
Total.....	\$74,223 80
Operating expenses for the month.....	26,987 30
Net earnings.....	\$47,236 50

The business of last week footed up thus:

Passengers.....	\$13,750 00
Freights.....	10,593 00
Mail and Express.....	853 00
Total.....	\$25,196 00

—Judge Goodloe has ordered a special term of the Fayette, Ky., Circuit Court, for Saturday, the 29th inst., for the purpose of receiving the report of the commissioners appointed to make sale of the Covington and Lexington Railroad, and acting thereon. This is the sole purpose for which the term has been ordered, and the various parties interested will, of course, be properly represented on the occasion.

—The Receiver of the Ohio & B. & O. Railroad has filed his Report for the month of August. We compile from it the following statement:

RECEIPTS.

From Passengers.....	\$22,380 61
" Freight.....	32,744 81
" Express.....	727 29
" Mails.....	2,378 70
	\$58,281 41
Balance due from other roads on passengers....	6,455 33
Balance due from other roads on freight.....	13,222 93
Balance due from local agents for freight.....	2,810 56
Total earnings of road for August.....	\$80,720 13

EXPENSES.

Transportation Department:

Passengers.....	\$3,019 17
Freight.....	6,104 64
Fuel.....	5,352 94
	\$14,476 75
Machinery department.....	11,825 20
Road department.....	10,636 55
General expenses.....	2,243 37
Construction.....	2,341 75
Total expenses.....	\$42,104 62

Balance due other roads:

On passengers.....	1,205 06
On freight.....	27,411 34
Total.....	\$70,721 62

—During the month of September the earnings of the Ohio and Mississippi Railroad were as follows:

Eastern Division—Passengers, Freights, and Mails.....	\$103,587 86
Western Division—Passengers, Freights, and Mails.....	74,992 74
Total.....	\$178,580 80

—A suit has been commenced before Judge McLean, of this district. The parties are Messrs. Holmes, Sheldon and Granger, heirs of the original proprietors of the "Connecticut Reserve," and the Cleveland, Columbus and Cincinnati, the Lake Shore, the Cleveland and Toledo, and the Mahoning Railroad companies.

The plaintiff's bring an action of ejectment against the Companies named for the possession of some eight or nine acres of land upon which the Union Depot at Cleveland now stands. They claim that the Mahoning river, at the foot of Bath street, was changed from its original course, and that that portion of the street on which the depot is situated was never accepted for a public street, nor so used

as to give a permanent right. They, therefore, claim that the title to the land is still in the heirs of the original purchasers, and ask to have the Railroad Companies dispossessed.

The value of the land is put down in the bill of complaint at \$1,000,000. The improvements put upon it by the Railroad Companies, will probably reach an aggregate of \$600,000, while those of the United States are nearly \$400,000 more.

—One hundred and fifty cords of wood belonging to the New York Central Railroad, were burned at Savannah Station on Friday last.

—The formal opening of the Louisville and Nashville Railroad will take place on the 25th inst.

—The annual election for Directors and Officers of the Evansville and Crawfordsville Railroad Company was held last week, which resulted in the choice of the old Board, excepting Mr. Garrett, of Carlisle, and Mr. P. E. Harris, of Rockville. H. K. Wilson, of Sullivan, was elected to fill the place of Mr. Garrett, and John Ott to fill the place of Mr. Harris.

Mr. Ingle was re-elected President and Superintendent, and Mr. Martin Secretary. The officers of the Company are anxious to finish the uncompleted section of road between Rockville and Terre Haute, and it is the intention of the Board to hold a meeting at an early day to consider some tangible proposition looking to that result.

For the Railroad Record.

DEVELOPMENT OF SOUTH-WESTERN ALLEGHANIES.

BY DAVID CHRISTY.

(Concluded)

Two points remain to be noticed: The water power and the timber. From what has been said in relation to the soils, and the condensation of atmospheric vapor into rain, by its contact with the higher mountain ranges, it will be readily inferred that the streams of water must possess a great degree of permanency. This is the fact, in relation to nearly all of the rivers, and larger creeks, in the mountains. The rains percolate slowly into the soils and sub-soils, instead of running off by surface drainage, and the springs are thus, as a general thing, very permanent, and do not vary in a great degree, in the volume of water they afford. The creeks, and the rivers, as a matter of course, have a corresponding degree of permanency. Take Cherokee County, as an example, as to the number of streams within a given area, which will afford a sufficiency of water power to propel machinery. First, there is the Little Tennessee River, bordering it upon the east, with a number of creeks running into it, then Cheoah river, made up of Tellulah, Long Creek, Atoah, Big Snow Bird, Little Snow

Bird, West Buffalo, Sawteetlah, and Slick Rock Creeks, on the west, with one or two on the east; then Valley River, with its tributaries; Hiwassee River, with Peach Tree, Fier's Creek, Tusquitta, and Shooting Creeks, on the east, and several others on the west; then Nottey River, and other streams, which it is needless to enumerate. The amount of water in many of the creeks is ample for water power, and the rivers, if not available, will be useless because of a superabundance of water.

The fall in many of the mountain streams is very considerable, often 50 to 80 feet to the mile, and sometimes more. The rivers have a proximate uniformity of fall, that may be understood from the investigations in relation to one of them. The Ocoee River, for a distance of 24 miles, from Ducktown mines to Parke's mill, has a fall of 964 feet, or about 40 feet to the mile. From thence to its intersection with the Tennessee River, the fall is only 62 feet, and the distance is at least 25 miles. The other rivers being equal to this, in the amount of fall they possess, it will be easy to estimate their adaptation to manufacturing villages; and when the mildness of the climate, the healthiness of the country, and its central position between the grain-growing and cotton districts is considered, it needs no prophet to foretell that this region must one day be the Manchester of the United States.

In relation to timber, it is only necessary to say, that the varieties are the same that prevail throughout Tennessee, Kentucky, Ohio, and Pennsylvania, only that in many of the coves and mountain sides, the trees are often vast superior in size and symmetry. In the article of *tannin*, alone, the lands will be productive of a vast amount of wealth, so soon as the bark can be worked up and find means of transportation. This will be effected on the completion of the Rabun Gap Railroad, now in the course of construction. The timber, itself, will also be of great value for transportation to the southern cities, for building purposes and the construction of ships.

As to the size of timber, the following may be taken as a proximate example, though in other localities it is of often larger, and affords greater varieties. The higher parts of the mountains abound in the varieties of oak which yield the largest per cent. of *tannin*.

Take the following measurements, in Tuskegee Cove, near the Little Tennessee River, in Cherokee County, North Carolina, as examples—the line being stretched around them about four feet above the ground:

Black Locust, in circumference, feet.....	6½
Buckeye.....	12
Shell-bark hickory.....	9
Sugar maple.....	8
White maple.....	7½
Chestnut.....	19½
Yellow Poplar.....	18½
Black oak.....	10
Beech.....	11

In other localities the wild cherry, black walnut, and the several varieties of hickory and oak, attain a size about equal to these.

[From the Charleston Mercury.]

THE BLUE RIDGE RAILROAD—ITS ADVOCATES AND ADVISERS.

It strikes us that the various speeches and written essays on the Blue Ridge enterprise, have overlooked some vital and important facts.

While they have been endeavoring to set forth the splendor of the enterprise, and its magical influence to be exerted on the commerce and general prosperity of the State on the one side, and the utter worthlessness of it on the other, we think the parties have not paid sufficient attention to the fact that, aside from the credit of the company, which is nothing more than a phantom, all the means under their control (including the State subscription of a million of dollars) there is not capital enough left to complete that portion of the work (fifty-two miles) that is within the limits of South Carolina. It is needless, then, to cavil about small matters, or to enter into long calculations about the probable incoming means to carry out to completion the vastly extensive work, unless the capitalists of the country believe it is to prove profitable; for without that sort of confidence the bonds of the company can not be made available. We have looked with care over all the reports that have been issued by the company, and have failed to see any thing that would induce us to purchase Blue Ridge Railroad Bonds at any price that can be fixed on them; nor have we seen anything which we think calculated to draw from the pockets of capitalists the slightest amount of means to relieve the State from the whole burden of carrying out a work which involves the building of a great highway outside of South Carolina, through three other States—a proceeding which has no example, and is positively unprecedented in the United States. Nor is there an example to be found in the history of railroading in all countries.

It is an easy matter for an over-sanguine man to sit down and make a fortune on paper. If one were allowed to count as capital all the bonds he could make and issue, he might deem himself able to perform mighty works.

It has struck us that in all the Blue Ridge reports, too much stress has been laid on sources of income, which would be regarded by capitalists and practical financiers as entirely unavoidable.

After all that has been, or may be said, about the means to accomplish this great undertaking, the simple fact stares us in the face, that the Blue Ridge Company in South Carolina have been six years at work, and have exhausted all their means without more than half completing the fifty-two miles in this State, leaving one hundred and forty-three miles of the work almost wholly unprovided for.

The capital subscribed in this State, is one million on the part of the State..... \$1,000,000
City of Charleston..... 1,049,000
Individuals..... 278,659
Total..... \$2,327,659

Of the above sum, two millions one hundred and twenty-six thousand five hundred and thirty nine dollars had been expended on the 10th of November, 1858, (\$2,126,539)—leaving a balance of the subscription in South Carolina, unexpended, at that date, of two hundred and one thousand, one hundred and sixty dollars, (\$201,160.) This was Judge Frost's report, when he stated to the Legislature that the work would be suspended unless the State granted further aid. If the Company be able to finish that portion of the work

by mortgage bonds, or any thing else within the reach of their financial power, we shall be rejoiced but greatly deceived.

If the Legislature will follow the wise commendation of the Orangeburg meeting, to stop all appropriations, except to finish the work in South Carolina, the State will soon see that the Blue Ridge Company is utterly unable to finish and equip even that small portion of the work. It will take, at least, a million more than they have at command to complete it, unless they can sell first mortgage bonds.

Then, is it not vain for us to talk about the hundred and forty-three miles that remain almost unprovided for in Georgia, North Carolina, and Tennessee?—a mountain road, the very sight of which would appal the most daring.

With scarcely any individual aid in Tennessee, two hundred and fifty thousand dollars (\$250,000) of county bonds, a forced issue against the will of many, and six hundred and forty thousand dollars (\$640,000), a loan on stringent terms from the State of Tennessee—both sums put together would hardly make an impression on so gigantic an undertaking before it would be exhausted. The subscriptions in North Carolina, which are really *bona fide*, and those in Georgia, have stood so long that they are out of date, and will, in all probability, not be paid—as is the case with some of the Charleston subscribers, who we know do not intend to pay. Why, if you were to tax all that portion of North Carolina and Georgia that feels an interest in the work, to the full extent of their ability to pay, it would not furnish means sufficient to build five miles of mountain road.

That the wealthy citizens of Charleston should come forward with an individual subscription of fifty-two thousand dollars only, and some of that bogus—if all paid, not enough to build one mile of road—and appeal to the patriotism of the State for aid to build a mountain railroad, one hundred and fifty-five miles long, with tunnels and bridges scarcely out of sight of each other, proves to our minds conclusively that they are either deficient in the necessary enterprise to avail themselves of a western railroad outlet, or that they do not believe in the successful utility of the Blue Ridge Road.

The truth is, that the intelligent portion of the mercantile men in Charleston do not believe it will benefit either the State or city, and would be perfectly willing to see the whole matter wound up with the completion of the South Carolina end of the road. What, then, shall be done? The response is—"Stop the work when we have finished so much of that portion of it in South Carolina as our capital at command will complete, and let matters stand as they are until Georgia shall grant a charter for the Hiwassee Road." That will give us a straight line to the only portion of the valley of the Mississippi that Charleston can gather trade from. We can afford to wait for that, for we now have a perfect thoroughfare from Charleston to Memphis, Nashville, (and soon to be to Louisville,) and all that region of the rich valley that lies between Louisville and Memphis. Above Louisville the trade will go to the eastern cities, and can not be drawn to Charleston by any railroad that may be built. If the projectors of the Charleston and Cincinnati Road could have foreseen the state of things that has grown up, innumerable railroads leading from the northern cities to Cincinnati, built and managed by private enterprise—I say, if they could have foreseen that all this was to come about years before

our work could be completed—and then that we were to have such a perfect and reliable outlet from Charleston to that vast region to which we now have access, they would have scouted the idea of calling on the State to exhaust her credit in carrying out so mighty and useless an undertaking as the Blue Ridge Railroad. The State herself would not have listened to such a proposition, even with three millions of individual subscriptions to back her. The truth is, that the State does not want the Knoxville Road. It does not point in the right direction. We would not give a copper for the charter from Georgia, which was obtained for the purpose of completing the line of Road to Knoxville, about which so much has been said and so much alarm created, lest we loose that great privilege by failing to build the road in the time prescribed by the charter.

What greater assurance can we have that we will always have open thoroughfare through Georgia, than the fact that a large portion of her railroad improvements depend for their existence on the Charleston trade. It has been ascertained, and much influence brought to bear on the minds of members of our Legislature, that the State of Georgia stands in the way of Charleston trade, and uses her power to discriminate in favor of Savannah and against Charleston. It is all fudge—nothing more than a bug-bear manufactured for the occasion.

Charleston, it seems, lacks the enterprise which characterises the people of Baltimore, and which has driven that city ahead. With no better western outlet, indeed nothing like as good as that which Charleston enjoys, she has held a successful competition with Boston, New York, and Philadelphia, large and wealthy cities close by her; and with all those disadvantages, Baltimore has increased her population in ten years—from 1840 to 1850—sixty-seven thousand. Now, if Charleston and the great capitalists of that city choose to lie still and hold on to their money, why should the back country submit to a levy of taxation to help her? If the city of thirteen millions (\$13,000,000) of Bank capital, which supplies the South-west with money to trade on, can not afford to keep up steamboats in sufficient number to compete with Savannah, they may expect nothing else but to go behind Savannah, and need not attempt to lay the blame on Georgia.

The Georgia Central Railroad Company own a line of steamers which ply between Savannah and New York, and hold a controlling influence in another line. That Company is also building a large steamer for that service, which is now nearly complete, and have it in contemplation to put boats enough on in the course of the coming year to make a daily line between those places. Charleston and the South Carolina Railroad Company will have to follow, or lose a valuable trade that now lies within their reach. We understand that the Georgia Railroad Company is alive to the matter and ready to furnish aid and join the South Carolina Railroad in a work in which they are mutually interested.

If the city of Charleston can not control the South Carolina Railroad, and cause that company to sympathize with her, as sound policy would dictate, that company deserves a position in the rear rank, compared with the Central Road of Georgia. Inertness and sloth, together with a grasping desire to hold on to the almighty dollar, will often warp the judgment of sensible men, and cause them to lose sight of the fact that a great railway, like that of the South Carolina Railroad, can not pros-

per permanently, without going hand-in-hand with the city that supports it. Anything that tends to prosper Charleston, and increase her prosperity, must, of necessity, react on the South Carolina Railroad.

That company has an income of one million five hundred thousand dollars (\$1,500,000) per annum, and could afford from its own means to put on a line of steamers every year; and in this way, in a very short time, increase its income nearly, if not quite, a million more, and have control of all the steamboats. An energetic move of that kind would soon dispel the idea that the State of Georgia was in our way. She would most willingly extend her works so as to receive any addition of trade which Charleston may give.

Is it not a reproach to our emporium and the South Carolina Railroad, that in this age of steam and lightning speed, that the city which has so long talked of becoming the Queen of the South, should permit the small city of Savannah to take the carrying trade from her?

In what way may we expect her to compete with the enterprising people of Baltimore for the trade of East Tennessee? If the State were to expend ten millions for a railroad and give it to Charleston, it would not overcome so monstrous an evil. Baltimore has enjoyed the trade of East Tennessee without much interruption for forty years, and has recently been put in direct communication with that section of country by the Virginia and East Tennessee Railroad. It will take more than our usual enterprise, with the Blue Ridge Road complete, to obtain even a moiety of that trade, not in itself altogether sufficient to support a railroad independent of a thoroughfare for travel, which the Virginia and East Tennessee Railroad have, and never can be diverted by the Blue Ridge Road.

Now, we will suppose that we shall be able, after the Blue Ridge Road is completed to Knoxville, to raise five millions more, to cut through the Cumberland mountain and reach Lexington, in Kentucky, thus placing ourselves in direct communication with Cincinnati. What would be the result. In answer, we have only to mention the fact, that Charleston made a great effort to reach Nashville with a railroad and tap that rich region of country. She also did the same to extend her trade to Memphis, and the result is, that those two places have tapped her trade, and Memphis is to become a great inland city. There are now twelve hundred houses building in that place, and Nashville has more large jobbing houses than Charleston has. If she has not energy enough to hold a competition with those two interior towns, and will allow them to take away her trade, to thrive and grow into large cities from the commercial traffic that the enterprise and properly directed capital of a seaboard city ought to draw to it, how can the city of Charleston look with a reasonable hope to a successful competition with Cincinnati?—a town which has grown into a rich commercial city of over two hundred thousand inhabitants, and which commands the distributing trade of more than three hundred miles around.

By the great eastern works leading to that city, Cincinnati can send her heavy agricultural articles, such as bacon, pork, beef, flour, etc., to Boston, New York, Philadelphia, and Baltimore, at cheaper rates than we, in this region, can have similar articles transported two hundred and fifty miles in that direction. Boxes and bales of dry goods are carried to Cincinnati in return from those cities at fifty cents a hundred, and often for less than that

sum, while we have to pay fifty cents a hundred on similar goods from Charleston to Columbia. Cincinnati has advantages with the northern cities for her carrying trade that we never can acquire. With immensely costly and perfect works carrying to and from the eastern cities so cheap, how can we look with a reasonable hope for trade from any country within reach of Cincinnati, while our commerce will have to pass through the hands of nine railroad companies between that city and Charleston?

The whole project of extending our railroads to that portion of the great western valley, will end in wind, as it ought to do, for no good can grow out of it; and our million which has already been expended, can not be saved in any other way than to finish the South Carolina end of the road from Anderson to Walhalla, or the Georgia line, if means can be commanded to build it that far. Since we have been talking of making our city a great emporium, and the "Queen City of the South," Cincinnati, which was behind Charleston in population, has grown to be a great center of commerce, and has now ten times as much jobbing trade as Charleston.

We think, with these views before us, it is at least prudent to stop and consider, before we allow the State to involve herself in an undertaking where there is so slender a prospect of realizing our magnified expectations.

This may not exactly suit those who are in hot haste after State appropriations; but it is in accordance with the views of a Foggy.

PROCEEDINGS OF THE ST. LOUIS AND IRON MOUNTAIN RAILROAD CONVENTION.

St. Louis, Sept. 29, 1859.

Pursuant to an invitation of the St. Louis and Iron Mountain Railroad Company, a large number of delegates from the counties of the South-eastern portion of Missouri met in the Mercantile Library Hall, in the city of St. Louis, on the 29th of September, 1859, and were organized by calling to the Hon. Wm. P. Darnes, of Scott County, to the Chair, and appointing J. W. Morris, of Cape Girardeau County, Secretary.

On Motion of N. W. Watkins, of Cape Girardeau County—a committee, consisting of one from each of the counties of Missouri represented in this Convention, be appointed to select permanent officers for the Convention.

Whereupon the Chair appointed the Committee:

Who retired to consult of their duties.

During the absence of the Committee, Col. E. J. Bullock, of Columbus, Ky., was called upon, and addressed the Convention. Before concluding, the Committee returned and reported the following names for permanent officers of the Convention:

Col. Lewis V. Bogy, of St. Louis, President.

Hon. Wm. C. Ranney, of Cape Girardeau, and Orson Bartlett, of Stoddard County, Vice Presidents.

Robert A. Hatcher, of New Madrid County, and John W. Morris, of Cape Girardeau County, Secretaries.

On taking the Chair, Col. Bogy, after returning thanks for the honor conferred upon him, addressed the convention at length upon the objects of the Convention and the great importance of the ends sought to be accomplished, and counseled harmony and conciliation in all its deliberations.

On motion of Gen. Watkins, Delegates from the State of Mississippi, Arkansas, Tennessee

and Kentucky, who were present upon the invitation of the St. Louis and Iron Mountain Railroad Company, were requested to take seats and participate in the deliberations and proceedings of the Convention.

On motion of Col. Thornton Grimsley, each Delegation present was requested to hand in to the Secretaries a list of its Delegates; whereupon the following Delegates were reported as being in attendance.

[There were fourteen counties in the State of Missouri; two counties from Arkansas; Columbus and Hickman, Ky.; Nashville and Memphis Tenn.; St. Louis and Iron Mountain R. R. Co.; Nashville and Chattanooga R. R. Co.; Nashville and Northwestern R. R. Co.; Tennessee and Alabama R. R. Co.; Mississippi Central R. R. Co.; Mobile and Ohio R. R. Co.; Mississippi and Tennessee R. R. Co.; Mississippi and St. Louis R. R. Co.; and the St. Louis Chamber of Commerce were represented in the Convention.]

The following resolution was then offered by W. P. Darnes:

Resolved, That the President of this Convention appoint a committee, to be composed of one from each county in South-east Missouri, to prepare a series of resolutions setting forth the object of the meeting of this Convention, the importance of our Southern railroad connections, embodying such requests as they shall feel justified in making to the members of our Legislature from South-east Missouri, setting forth the claims that the project is entitled to as regards State policy, &c. Also, inviting each delegation from abroad to furnish, in a shape for publication, all the importance and advantages of the various connections which they are desirous of making, all to be reported for adoption or rejection by the Convention.

Mr. Swayne, of Memphis, offered the following substitute.

Resolved, That a committee, composed of one or more gentlemen representing each of the proposed routes for the extension of the Iron Mountain road, be appointed by the President of this Convention, whose duty it shall be to report to this Convention the advantages of their several routes; that the reports be open for discussion, and then be referred to the Board of Directors of the Iron Mountain Road, to be used by them before the Legislature of Missouri, in procuring aid for the extension of said road South; or any of said committees, not prepared to report to this Convention, may report after the adjournment of this Convention, to said Board.

Mr. Lynch, of St. Louis, then offered the following:

Resolved, That the Chair appoint a committee of one from each delegation from Missouri, to draft resolutions expressive of the sense of this Convention in relation to the extension of the Iron Mountain Railroad through South-east Missouri.

Mr. Ranes, of Nashville, offered the following in lieu of all previous resolutions:

Resolved, that it is the sense of this Convention that it is of the highest importance to the best interests of St. Louis, and of the State of Missouri generally, that the St. Louis and Iron Railroad should be extended as early as practicable, to such point or points on the Mississippi river, or to such point or points on the State line dividing the State of Missouri from the State of Arkansas, as may hereafter be found most proper and advantageous to said State of Missouri.

Mr. Ranes, of Nashville, then introduced the following resolution:

Resolved, That it is the sense of this Con-

vention, that it is of the highest importance to the best interests of the city of St. Louis, and of the State of Missouri generally, that the St. Louis and Iron Mountain Railroad should be extended as early as possible to such point or points on the Mississippi river, or to such point or points on the State line dividing the State of Missouri from the State of Arkansas, as may hereafter be found most proper and advantageous to the State of Missouri. Also,

Resolved, That the President and Directors of the said Iron Mountain Railroad Company be requested by this Convention to prepare and lay before the Legislature of the State, at its next session, a written statement of the advantages that will result from the extension of this road to some point or points on the Mississippi river, or said Missouri State line.

Resolved, That each delegation representing the various routes and connections which have been proposed for the extension of said road be requested by this Convention to select two of their own number who shall prepare and report to the President and Directors of the Iron Mountain Railroad Company, as early as convenient a written statement of the advantages that will result to the State of Missouri and the city of St. Louis by the respective routes and connections which they propose.

Resolved, further, That the President and Directors of the said Railroad Company be requested to publish, in pamphlet form, their own report, accompanied by the various reports of the committees selected to represent their respective routes, and lay the same before the next Legislature.

The Convention was then addressed at considerable length, by Col. Stevenson of Nashville, Mr. Tate of Memphis, Col. Bullock of Columbus, and Mr. Sanders of Helena. The last named gentleman occupied the floor when our reporter left.

The reports of the delegates from the several counties will be given to-morrow.

THE IRON MOUNTAIN RAILROAD CONVENTION.

This Convention adjourned at a late hour of Thursday night, after listening to exceedingly well digested speeches from Mr. Stevenson, of Nashville, Col. Tate President of the Memphis and Charleston Railroad, and others. Three sessions, it is proper to say, were held during the day, and in the discussions at these sessions, Mr. Barnett, Col. Swayne, and Mr. Tresevant, of Memphis; Gen. Watkins, Mr. Herr, and Mr. H. Moore, of Cape Girardeau; Mr. Darnes, of Scott; Mr. Lawson of Ripley; Col. Bogy, of St. Louis, and Col. Stevenson and J. S. Rains, of Nashville, participated.

The debate in the opening, we are told, was a most interesting and able one—the leaders in it being both railroad men in Tennessee, where, and in all Southern States, railroads are built for less money, and are managed in a better way, and pay better dividends than any other roads in the United States. The gentlemen were all prepared with their facts and figures—they presented them in an excellent and tangible shape—they had the data to go upon; and the only regret about the whole matter is, that not a man who might be supposed to have any interest in St. Louis, not a millionaire, nor half a millionaire, nor any number of our citizens outside of those who had a duty assigned to them, were present to here the discussion. We confess it with much mortification, but it is the fact that, while men have left their homes and their business in Kentucky, and Tennessee, and Arkansas, and South-Eastern Missouri, to come here and con-

fer with us about a matter in which we have after all, the greatest interest, our own citizens, millionaires and all, were so much engaged that they could not give them two or three hours' attention—not even to hear what they had to say in a matter in which all of us are so deeply interested. It does not look well, to say the least of it.

To-day, we observe that intelligent and well informed gentlemen—Col. Tate, of Memphis, and Mr. Stevenson, of Nashville—are to address the Chamber of Commerce on matters pertinent to this subject, at the Exchange, at 12 o'clock, and we shall note the courtesy extended to them by our merchants and business men.

The resolutions finally adopted by the Convention, and which were offered by Mr. Rains, of Nashville, after some amendment, took the following shape:

Resolved, That is the sense of this Convention that it is of the highest importance to the best interests of the city of St. Louis, and of the State of Missouri generally, the St. Louis and Iron Mountain Railroad should be extended as early as practicable to such point or points on the Mississippi river, or to such point or points on the State line, dividing the State of Missouri from the State of Arkansas, as may hereafter be found most proper and advantageous to said State of Missouri.

Resolved, That the President and Directors of said Iron Mountain Railroad Company be requested by this Convention to prepare and lay before the Legislature of the State, at its next annual session, a written statement of the advantages that will result from the extension of said road from some point or points on said Missouri State line.

Resolved, That each delegation representing the various points which have been proposed for the extension of said road, be requested by the Convention to select two of their own number, who shall prepare and report to the President and Directors of the Iron Mountain Railroad Company, as early as convenient, a written statement of the advantages that will result to the State of Missouri and the city of St. Louis by the respective routes which they propose.

Resolved, That the President and Directors of said Railroad Company be requested to publish a pamphlet from their own report, accompanied by the various reports of the committees selected to represent their respective routes, and lay the same before the next Legislature.

These resolutions, if the several committees will do their duty at an early day, will have an excellent effect. They will present, of course, every possible argument in favor of the respective routes, and the reports from these sources will enable the Iron Mountain Railroad Company to go before the Legislature with a detailed statement of facts in regard to each of the routes, founded on data presented by their respective advocates. In this way, the Legislature can act understandingly and for the best interests of the State.—*St. Louis Republican*, Oct. 1.

COVINGTON AND LEXINGTON R. R.

The following letter from Mr. Dudley, of Lexington, Ky, we copy from the *Commercial*.

LEXINGTON, October 12, 1859.

DEAR SIR:—The *Covington Journal* of Saturday last, in noticing the sale of the Covington and Lexington Railroad, says:

2d. "It is extraordinary that property which

has cost the Company \$4,000,000, and which is making more than enough over and above running expenses to pay the interest on its debts, should be sold for a debt due of less than \$250,000. *This immense sacrifice of property is not only extraordinary, but we firmly believe contrary to every principle of equity and justice.*"

It seems to me that a few moments reflection will satisfy any candid mind of the injustice of the words I have italicised.

If a debtor fails to meet his liabilities the creditor may compel a sale of his property to satisfy his debt. This is an absolute right of the creditor over which the Courts have no discretionary power. A Railroad Company occupies precisely the same relation to its creditors as does an individual. What would be thought of a farmer, who, failing to meet the interest due upon a mortgage of his farm, should, when sued, come into Court and say; "It is true that I have not paid and can not now pay the interest on this debt. But my farm is exceedingly valuable and has cost me many times over the amount of the debt for which it is pledged. If I am let alone a few years the profits of the land will pay the debt. It is contrary to every principle of equity and justice that my creditor should sell it!" Or of a laboring who should say to the Court, "Don't sell my little property, it is all I have wait on me a few years, my daily labor yields me profit more than sufficient to pay the interest on my debts, my life is insured for the benefit of my creditors, who are therefore in no danger of ultimate loss. It is unjust and inequitable to sell me out under such circumstances!" Such defences in the case of an individual would be laughed out of Court.—Why should they be entitled to more consideration when urged by a corporation?

In this connection a good deal of importance has been attached to the maxim "that Courts of Equity will always relieve against forfeiture." The doctrine is correct but wholly inapplicable. For it is indispensable that the party seeking relief against a forfeiture should first make compensation for the default which occasioned it—while in this instance the company not only failed to make, but was compelled to admit its present inability to make compensation for the interest in arrear on its bonds.

The *Journal* speaks of the sale as made for a debt due of less than \$250,000. It is true that the debt due to the parties who demanded the sale did not exceed that amount, but the debt actually due by the company was vastly greater.

The arrears of interest on the second mortgage bonds was in round numbers.....	\$110,000
Arrears of interest on third mortgage bonds was in round numbers.....	65,000
Arrears of interest on the income bonds was in round numbers.....	100,000
The principal of the income bonds due in July last.....	197,500
Making the actual amount due at the date of the sale.....	\$472,500
Besides which there is due of income bonds in December next.....	176,500
And of income bonds in February next.....	146,500
Making the amount due and to become due in six months.....	793,500
Add interest on this sum to March 1st, 1862—two and a half years.....	116,500
Then the principal of the first mortgage bonds due March 1st, 1862.....	260,000
And the interest on the third mortgages for the same time.....	330,000
And we have due and to become due in two and a half years.....	\$1,522,000
From which deduct profits of road at \$240,000 per annum.....	600,000
Deficit March 1st, 1862.....	\$922,000
The interest on which to March, 1867, would be. To which add the interest on the remaining first mortgage bonds and the second and third mortgages for same period.....	275,000
	615,000

And the principal of the first mortgages due March, 1867.....	140,000
And we have due and to become due before March, 1867.....	\$1,952,000
From which deduct five years profit of road at \$250,000.....	1,250,000
Leaves deficit March 1st, 1867.....	\$703,000

It is therefore plain that a postponement of eight years would not benefit the company or its unsecured creditors to the amount of a single cent, while those who are secured by the mortgages would be kept out of their money, and the lives and property of the public kept during that whole period at the mercy of an irresponsible corporation. With the conduct of the Directors and officers of the Company who have brought about this result, I have nothing to do. My only object has been to vindicate the judgment of the Court, by showing that a sale of the road was absolutely necessary, and that a postponement could have brought no possible relief to stockholders or creditors.

Very respectfully yours, *

THE COMPACT BETWEEN THE C., H. AND D., AND OTHER RAILWAY LINES.—It is understood that the compact between the Cincinnati, Hamilton and Dayton, and other railways connecting with it, has finally been signed by all the parties, and will be continued for one year from last August, when it expires by limitation. A stockholder of the C., H. and D. makes the following explanation of the contract in a communication to the *Gazette*:

The parties to the contract for opening the Delaware line are the C., H. and D., S., D. and C., S., Mt. V. and P., and C., C. and C. Companies. The Dayton and Michigan Road forms no part of the line, and consequently the D. and M. Company could not properly be made parties to the contract.

The same contract defines the business which the parties conceive most naturally belongs to each connection of the C., H. and D. Road viz: The all-rail business, *via* Cleveland and Pittsburgh, to the Delaware line; the rail and water business for Buffalo, to the Sandusky line; and the business to the North and North-west, as well as to Canada, to the Toledo line; but each interest or company is left free to procure business in Cincinnati, which is to be done over the C., H. and D. Road on equal terms and at the same price. In case either company connecting with the C., H. and D. Road, and forming part of any of the three lines named, reduce rates to competing points East, North or North-west, below those agreed on by all the parties interested, the C., H. and D. Company stipulates to charge such company local rates to and from Dayton. This is for the mutual protection of all her connections.

The C., H. and D. Company agrees to represent, advertise and work for the Dayton and Michigan, the Sandusky, Dayton Cincinnati, and Delaware lines, as hereinbefore named, leaving each company composing a part of any of the lines, to advertise, work for and obtain all the business she can in Cincinnati, to be carried over the C., H. and D. Road at the regular *pro rata* rates.

In making the Delaware contract the C., H. and D. Company have aimed to do equal justice to her connecting roads, to provide herself with the best all-rail route to the East, and to put herself in position not to be injured by having to carry freights below cost both East and North, in consequence of the rivalry of her connecting roads.

—The Dubuque and Pacific Railroad was completed to Manchester last week. Trains have commenced running regularly.

READING RAILROAD.

A correspondent at Philadelphia writes as follows to the *Tribune*:

"There is of course a large amount of conjecture afloat touching the condition and prospects of the Reading Railroad. The recent collapse of the stock from 23 to 19 is not owing to any new feature unfavorable to this concern, nor to the fact of a \$3,000,000 loan coming due next year, because all stock operators were aware of that fact. But Reading is altogether a fancy—it can never pay dividends again, and is, therefore especially sensitive to the condition of the money market. People have no confidence that the large sales reported as being made between boards ever took place. The future of money looks decidedly blue, and it is the curtailment by the New York banks that has done the business. Foreign goods continue to pour in as freely as ever, and specie to go out, and it is felt here that this drain can not be maintained without something giving way. Fancy stocks always break down first, and sink a little lower at each collapse. But then, even under any circumstances, most men are getting shy of Railroads. The transactions at our Stock Board have dwindled away almost to nothing. There are members of the Board who don't attend the meetings once a month, so little is there doing. Instead of the activity of three years ago, all is dullness and stagnation. Much of this inactivity is owing to the discredit which recent events have thrown on railroad securities, destroying all desire to speculate in them. But without this, the great underlying fact that our industry is in the hands of foreigners, our workshops on the other side of the water instead of being here, and that as a nation we have practically lost the control of our own affairs, is quite sufficient to account for this falling off in stock transactions. Money is comparatively plenty, but the demand for it does not spring from a healthy condition of business. England pours in millions of her cloth and iron, but does not take a barrel of flour. Our wise men see how things are tending, and keep away from the Stock Board. As to Reading Railroad, the figures in relation to it are very remarkable, and throw the immense intrinsic value of the concern. Its whole cost is, in round numbers, \$24,000,000, including main stem and branches, the length being equal to 320 square miles. Its equipment consists of 142 locomotives, 5,634 coal and freight cars, and 58 for passengers. In the last six years it conveyed an average of 1,849,000 tons of coal, while the Lehigh Canal, the Schuylkill Canal, and the Wilkesbarre region averaged each only a little over a million tons each. These figures show the enormous capacity of the Reading over the best of its rivals. In the last six years its net receipts were \$12,173,951, and its expenses \$8,033,232. These figures are given from official sources. Yet, in the face of this seeming prosperity, its embarrassments have increased annually. It was opened in 1843, at a then cost of \$7,119,292, but at the end of five years its capital and debt had grown to \$12,236,559. The receipts of the last six years were \$3,249,623 more than in the previous ten, while the expenses were only \$145,322 more. During five years previous to the last the capital and debt increased $7\frac{1}{2}$ per cent, while the gross receipts increased $31\frac{3}{4}$ per cent. Its friends contend that it is by no means the broken-down concern which bulls and bears assume, while outsiders are disposed to think some efficient re-organization of its operations is alone needed to bring it back into line as a dividend paying paying concern. It is in possession of a princely business, which no rivalry can divert from it."

AN ADVENTURE IN A R. R. CAR.

After I had just taken my seat one evening at Paddington, in an empty carriage, I was joined just as the train was starting, by a strange looking young man, with remarkably long flowing hair. He was, of course, a little hurried, but he seemed besides to be disturbed and wild, so that I was quite alarmed for fear of his not being in his right mind, nor did his subsequent conduct re-assure me. Our train was an express, and he eagerly enquired at once, which was the first station whereat we were advertised to stop. I consulted my Bradshaw, and furnished him with the desired information. It was Reading. The young man looked at his watch. "Madam," said he, I have but half an hour between me and, it may be, ruin. Excuse, therefore, my abruptness. You have, I perceive, a pair of scissors in your work bag; oblige me, if you please, by cutting off my hair."

"Sir," said I, "It is impossible!"

"Madam," he urged, and a look of severe determination crossed his features, "I am a desperate man! Beware how you refuse what I ask, cut my hair off short, close to the roots, immediately; and there is a newspaper to hold the ambrosial curls."

I thought he was mad of course; and believing it would be dangerous to thwart him, I cut off all his hair to the very last lock.

"Now, Madam," said he, unlocking a small portmanteau, "you will further oblige me by looking out of the window, as I am about to change my clothes."

Of course I looked out of the window a very considerable time, and when he observed—

"Madam," I need no longer put you to any inconvenience," I did not recognize the young man in the least.

Instead of the former gay costume, he was attired in black, and wore a gray wig, and silver spectacles; he looked like a respectable divine of the Church of England, of about sixty-four years of age. To complete that character, he had a volume of sermons in his hand, which—they appeared to so absorb him—might have been his own.

"I do not wish to threaten you, young lady," he resumed, "and I think, besides, I can trust your kind face. Will you promise not to reveal this metamorphosis until your journey's end?"

"I will," said I, "most certainly."

At Reading, the guard and a person in plain clothes, looked into our carriage.

"You have the ticket, my love," said the young man blandly, and looking at me as though he was my father.

"Never mind, sir, we don't want them," said the official, as he withdrew his companion.

"I shall now leave you, Madam," observed my fellow traveler, as soon as the coast was clear; "by your kind and courageous conduct, you have saved my life, and perhaps, even your own."

In another moment he was gone, and the train was in motion. Not till the next morning did I know, from the *Times*, that the gentleman on whom I had operated as hair-cutter, had committed a heavy forgery to an enormous amount, in London a few hours before I met him, and that he had been tracked into an express train from Paddington, but that, although the telegraph had been put in motion, and described him accurately, at Reading, when the train was searched, he was nowhere to be found.—*Household Words*.

FLORIDA RAILROADS.

Very few of our State, and many even in it, are not aware of the rapid strides *Internal Improvements* have and are making. From the following synopsis of the number of miles graded and ironed, it will be seen that we are ahead of some of our sister States and making rapid progress to overtake others. In January 1855, we had 21 miles from Tallahassee, to St. Marks of "common flat rail,"—a poor apology for a railroad;—it has since been re-graded and re-ironed with heavy rail; the Pensacola and Georgia, is graded to the Suwannee and is in process of rapid completion to Lake City—distance 106 miles—28 miles ironed, and the iron purchased for the remaining 78 miles; the central is graded from Lake City to Jacksonville, 60 miles—40 miles ironed, and the iron purchased for the balance; the Florida is graded from Fernandina to Cedar Keys 154 miles—122 miles ironed, and the iron purchased for the remainder; the Florida end of the Alabama and Florida railroad, 15 miles ironed and the iron purchased for the remainder.—So, we have 226 miles ironed, and three hundred and forty-one graded, and the iron purchased for 158 miles more, besides the short branch from the Pensacola and Georgia road to Mouticello, of three miles, and the branch now being graded from the Florida road to Ocala. We get from that excellent the *Floridian* the distance above as to the roads finished and graded in the East and Middle Florida—correcting however, its statement by adding 15 miles ironed and in fine running order from Pensacola in the direction of Montgomery, so that the persons at a distance may know the number of miles actually completed—as well as the additional fact (perhaps unknown to the *Floridian* and *Journal*) that the balance of the iron for our end of the Alabama and Florida road is purchased, and is now on its way to our city.

From the above statement it will be seen that our people are no *laggards*, but have accomplished as much, in fact, more in four and a half years than the same population have accomplished anywhere in the Union; and the additional fact must be taken into consideration that we have as much if not more sea-board, than all the Atlantic States combined, and hence we are less dependant on railroads for home purposes than any other State; but in order to have rapid and convenient intercourse with our sister States, and mutually benefit each by building up our seaboard cities and giving them access to our fine harbors for their produce and importations, we have thus in so short a time, with a very small population, made giant strides in the line of railroads.—*Pensacola Observer*.

ANOTHER RAILWAY ROW.

A meeting of the Directors and Shareholders of the Eastern Counties Railway, took place yesterday, when the usual scene occurred. *Mr. Punch* is unable, from the preternatural pressure on his space, to give the proceedings *in extenso*, but is happy to oblige the parties by the following condensed account of what occurred:

Mr. Horatio Love, the Chairman, was about to take the Chair, when it was pulled from under him by several shareholders, amid the applause of some and the disapprobation of others. After a severe fight, and the destruction of the Windsor chair he had intended to occupy, the honorable gentlemen succeeded in establishing himself on a cane-bottomer, shut

up his antagonists, and opened business. He said that they had assembled to consider—

Serjeant Tozer said that they were always considering and never getting dividends. It was the case of the song.

"There was an old man and he had an old cow,
And he had no victuals to give her;
So he out with his fiddle and played her a tune,
Consider my cow, consider."

The Company was the old cow, and the Chairman wanted to fiddle to them. (*Applause and Laughter*.) If music was the food of Mr. Love, he might play on, as Shakspeare said, but they wanted something more substantial.

They Chairman said they should have a substantial—he meant substantive motive directly. He hoped that they would hear him.

Mr. Waddington, as a gentleman, assured the honorable Chairman that they would do nothing of the kind. (*Cheers*.)

Mr. Jones said that the man who would not listen to the voice of love was a brute, whom it was base flattery to call a coward. (*Cries of Order*.)

The Chairman said that he had never sought his present office—

Mr. Brown said that he had sought the Chairman's office often enough, but never could find him at home, and whether he was away revelling in enjoyment at the expense of the Company, or was inside the office smoking, and would not answer the door, he could not say—

The Chairman. I never smoke, though I puff the Company sometimes. (*Cheering*.) Encouraged by that response he would proceed. He did not affect to deny that the Company was not at that time an *El Dorado*; or a *Golconda*, an *Ophir*, or a *California*. It was not an ever springing fountain of gold and silver, but—

Mr. Brown said that his accusation was borne out by the Chairman's words. That last was the habitual cant of the gambling table keepers at races, and the Chairman must be in the habit of frequenting races to hear such expressions. If instead of going to races he would attend to his business—

The Chairman. I never was at a race in my life, except one, when I went to the Race of Portland to buy stone for the Company, and—

Mr. Robinson. And a nice Bill of Portland you brought us in for the speculation. (*Hear, hear*.)

The Chairman. Hold your noise. Admitting, he continued, that the Company was not exactly prosperous, he nevertheless contended that it was not at a stand-still.

Mr. Williams. But its trains often are, and in a disgraceful way. I myself, with a lot of excursionists, were kept three hours the other morning waiting for conveyance to Rye House, and—

The Chairman. And what business had you to be going to Rye House. It was not a place for gentlemen, though all very well for the inferior classes. He should be ashamed to bring forward such an objection in a meeting like that. The honorable proprietor was not going to get up a Rye House Plot there, he could tell them.

Serjeant Tozer said that such a display of aristocratic indignation was all very fine, but he, on the contrary, asserted that the line was "snobbishly" conducted, and their *Bradshaw* was the book of snobs. (*Immense uproar*.)

The Chairman said that as sure as his name was Horatio Love—

Mr. Waddington said that there were more things in heaven and earth than were dreamt of in Mr. Love's philosophy, and several, especially, in the Eastern Counties Railway. The way, for instance, in which the porters bawled out the names of the stations, was most obnoxious and offensive.

The Chairman demanded whether the honorable proprietor would like to have their porters sent to Cambridge for education. It was on the line, only fifty-seven and a half miles from town, and any facilities—

Mr. Waddington said that the Chairman's irony passed him like the idle wind, but considering the perpetually falling fortunes of the Company, the Chairman reminded him of a Cambridge authority, the Master of Downing. (*Cheers*.)

Mr. Jones here tried something about Brazenose, but being informed that this was at Oxford, muttered that the Chairman had brass enough for anything, and sat down without any applause at all.

The Secretary then rose to read the Report, but the tremendous shower of hats that were instantly shied at him, compelled him, after some struggle, to abandon the idea. An exceedingly respectable hat hit him on the nose, on which he emitted a slight oath, but immediately apologized for making what he called a beaver-dam. (*Applause*.)

The Chairman said that he would now proceed to his duty of declaring a dividend—(*The meeting rose en-masse, and shouted for several minutes. Order being restored:*)

The Chairman would be obliged by their allowing him to conclude his sentence. He would proceed to his duty of declaring a dividend—(*Renewed sensation*.)—of declaring a dividend to be entirely out of the question at present, and he wished them a very good morning.*

The Chairman left the room, and a scene of indescribable confusion followed, in the course of which our reporter was, we regret to say, knocked down eight times in mistake for the same number of directors. In the course of a few hours the meeting quietly dispersed.—*London Punch*.

CIRCULAR OF CHICAGO & NORTH-WESTERN R. R. CO.

OFFICE CHICAGO AND NORTH-WESTERN R. R. CO.,
No. 12 Wall Street, New York, Oct. 3, 1859. }

SIR:—On and after Wednesday, the 5th inst., the Bonds of this Company will be exchanged for the Bonds of the late Chicago, St. Paul and Fond du Lac Railroad Company, to parties who have complied with the conditions of bond-holders' agreements.

For the purpose of paying the expenses of the sale of the road and the organization of the present Company, preparation of its conveyances, securities, &c., it will be necessary for the bond-holders to contribute an amount equal to three-quarters of 1 ¢ cent on the par amount of the old bonds. For this contribution they will receive Preferred First Mortgage Bonds, except for fractions less than \$100, for which fraction scrip will be given, exchangeable for such bonds.

It is desirable that these exchanges be made with all possible dispatch, as it is contemplated to remove the office of the Company to Chicago at an early day. By order,

E. W. HUTCHINGS, Treasurer.

* Our reporter seems to have made a mistake about this last part, as it seems that the Eastern Counties do pay a dividend. We fear that our young man has fallen into the melancholy mistake of preferring what he thinks to be smartness to what he knows to be the truth. As the rest of his report is unimpeachable, he remains in our service, but is "warned."

MONETARY AND COMMERCIAL.

There has been no material change in the state of money matters since our last issue. Serious complaint is still made of the backwardness of collections and the scarcity of currency. The demand for discount has not been met by the bankers, and large amounts of good paper has been offered outside. Rates are without change, viz., to depositors, if at all, 10@12, but parties not depositors 15@18, and street rates from 18@24.

Eastern Exchange in consequence of the scarcity of currency, is dull, but rates unchanged. We quote:

	BUYING.	SELLING.
New York Sight.....	45@50 prem.	3@4 prem.
Boston.....	37@40 prem.	3@4 prem.
Philadelphia.....	45@50 prem.	3@4 prem.
Baltimore.....	37@40 prem.	3@4 prem.
New Orleans.....	par.	3@4 prem.
American Gold.....	37 prem.	50 prem.

The N. Y. *Courier and Enquirer*, of Tuesday, says:—
“The sales at the Stock Board to-day were moderate in extent, and prices are generally lower, and correspond with the business of the Board. United States fives, 1855, sold $\frac{1}{2}$ higher than on Saturday. Virginia Sixes advanced $\frac{1}{4}$. Other State Stocks are unchanged. Pacific Mail Shares declined $\frac{1}{4}$. New York Central Shares $\frac{1}{2}$. Reading 2. Michigan Central $\frac{1}{4}$. Michigan Southern preferred $\frac{1}{4}$. Illinois Central $\frac{1}{4}$. Galena and Chicago $\frac{1}{4}$. Chicago and Rock Island 1.

“At the Second Board the sales were small. Pacific Mail Shares have declined again one per cent., closing at 71 $\frac{1}{2}$; Erie Second Mortgages are selling at 75, an advance of 2 per cent. For the Shares, holders ask 5 $\frac{1}{2}$. United States Five Per Cents of 1874, registered bonds, sold to-day at 103 $\frac{1}{2}$; the Coupon Bonds are 1@1 $\frac{1}{2}$ per cent. less. Compared with Saturday's cash sales, we note an advance in Virginia Sixes $\frac{1}{2}$; Missouri $\frac{1}{4}$; Erie Railroad Shares $\frac{1}{4}$; Panama $\frac{1}{4}$; Illinois Central $\frac{1}{4}$; Galena $\frac{1}{4}$; Rock Island $\frac{1}{4}$; Reading Shares have declined to 36 $\frac{1}{2}$, a fall of four per cent. in four days; Michigan Central sold to-day $\frac{1}{4}$ lower; Southern Preferred 1; Pacific Mail $\frac{1}{4}$.”

TRADE WITH CHINA.—The *Washington Constitution* gives the following official summary of the trade of Shanghai for the year 1858:

Tonnage Inward.		Tonnage Outward.	
Vessels.	Tons.	Vessels.	Tons.
British.....	290	126,205	174
American.....	97	56,280	56
Sundry.....	376	66,119	148
Total.....	764	242,624	378

VALUE OF THE IMPORT TRADE.

	Taels.	Dollars.
General Imports.....	19,017,049	28,145,232
Treasure.....	3,912,780	5,790,914
Total.....	22,929,829	33,936,146

VALUE OF THE EXPORT TRADE.

	Taels.	Dollars.
General Exports.....	30,633,759	45,323,163
Treasure.....	9,624,310	14,243,978
Total.....	40,258,069	59,567,141
Aggregate Imports.....	22,929,829	33,936,146
Aggregate Exports.....	40,258,069	59,567,141
Grand Total.....	63,177,898	93,503,287

ESTIMATED QUANTITY AND VALUE OF OPIUM IMPORTED.

25,122 chests Malwa.....	12,052,560	17,846,068
7,238 chests Patna.....	3,763,760	5,570,364
Total Opium.....	15,822,320	23,417,432

The foregoing summary is condensed from the official Custom House Returns of the trade of Shanghai during the year 1858, and is of peculiar interest at this time, when we expect daily to receive intelligence of the ratification of our new treaty with the Chinese Empire.

COVINGTON AND LEXINGTON RAILROAD INCOME BONDS.—The Commercial is indebted to W. A. Dudley, Esq., Commissioner, for the following important information relative to these Bonds:

LEXINGTON, KY., Oct. 17, 1859.

SIR:—I am daily receiving numerous letters of inquiry as to the numbers of the Income Bonds of the Covington and Lexington Railroad Company which are preferred by the judgment of the Court. My engagements leave me no time to furnish separate replies to so many correspondents, and I have therefore to say in reply to all:

That I am only required by the Court to ascertain and report the numbers, date of issue, and dates of sale of these

Income Bonds which were sold before the 16th of July, 1855. The right to priority of payment will be hereafter determined by the Court itself.

At present, then, I can merely say that there is evidence before me *conducting* to show the sales of the following Bonds at the date attached to each:

July 26, 1854—Of the issue of July, 1854, Nos. 26, 27, 29 Aug. 9, “ “ “ “ “ “ 11 to 25.
“ 12, “ “ “ “ “ “ 28.
“ 15, “ “ “ “ “ “ 30, 31.
“ 17, “ “ “ “ “ “ 32, 33, 34.
“ 18, “ “ “ “ “ “ 35 to 38.
“ 23, “ “ “ “ “ “ 39, 40.
“ “ “ “ “ “ 1 to 10.
Sep. 20, “ “ “ “ “ “ 44, 45.
“ “ “ “ “ “ 41, 42, 43.
Oct. 11, “ “ “ “ “ “ 62.
“ 24, “ “ “ “ “ “ 2, 8.
Nov. 2, “ “ “ “ “ “ 141.
“ 10, “ “ “ “ “ “ 77, 79 to
100, 122, 128, 130 to 131, 134, 138, 203 to 206, 210 to 300, 301
to 336, 391 to 400.
Nov. 14, 1854—Of the issue of July, 1854, Nos. 63, 70, 71.
“ 26, “ “ “ “ “ “ 116 to 130.
129.

Nov. 1854—Of the issue of July, 1854, Nos. 54, 55, 56, 68 to 61, 163, 164, 166 to 177.

Dec. 2, 1854—Of the issue of July, 1854, Nos. 160, 161, 178 to 186.

Dec. 9, 1854—Issue of December, 1854, payable Covington, Nos. 1, 2, 3, of \$500.

Dec. 22, 1854—Issue of July, 1854, No. 110.
“ 23, “ “ “ “ “ “ 111.
“ 27, “ “ “ “ “ “ 189, 193, 194.
“ “ “ “ “ “ 142, 165.

Jan. 6, 1855, “ “ “ “ “ “ 109, 139, 190, 191, 192, 198, 199.

Jan. 11, 1855—Issue of Dec. 1854, payable Covington, Nos. 17, 18, 19, of \$500.

Jan. 27, 1855—Issue of July, 1854, Nos. 196, 197, 200.
“ “ “ “ “ “ Dec., “ payable Covington,
Nos. 7, 9, 10, 116, of \$1,000.

Jan. 27, 1855—Issue of Dec. 1854, payable Lexington, No. 8, of \$1,000.

Jan. 27, 1855—Issue of Dec., 1854, payable Covington, Nos. 21, 16, of \$500.

Feb. 6, '55, Issue of Feb., '55, Nos. 1 to 100.
“ 21, “ “ “ “ “ “ December, 1854, payable Covington,
No. 20, of \$500.

Feb. 28, '55, Issue of December, '54, payable at Covington, Nos. 14, 15, of \$500.

Feb., '55—Issue of Dec., '54, payable Lexington, Nos. 14 to 18, of \$500.

March 2, '55—Issue of December, '54, payable Lexington, Nos. 6 to 10, of \$500.

March 5, '55—Issue of December, '54, payable Covington, Nos. 51 to 60, of \$1,000.

March 19, '55—Issue of December, '54, payable Covington, Nos. 62, 63, 64, of \$1,000.

March 29, '55, Issue of December, '54, payable Covington, Nos. 4 to 13, of \$500.

March 29, '55, Issue of December '54, payable Covington, Nos. 68, 69, of \$1,000.

March, '55, Issue of December, '54, payable Covington, No. 46, of \$1,000.

March, '55 Issue of July, '54, No. 54.

April 1, '55, Issue of December, '54, payable Covington, Nos. 76, 71, 72, of \$1,000.

April 4, '55, Issue of December, '54, payable Covington, Nos. 76 to 83, 85, 101, 102, of \$1,000.

April 4, '55, Issue of December, '54, payable Covington, Nos. 5, 6, 73, 74, 108, of \$1,000.

April 6, '55, Issue of December, '54, payable Lexington, No. 13, of \$500.

April 21, '55, Issue of December '54, payable Covington, No. 22, of \$500.

April 30, '55, Issue of December, '54, payable Lexington, No. 12, of \$500.

April 30, '55, Issue of December '54, payable Covington, No. 109, of \$1,000.

April 30, '55, Issue of July, '54, Nos. 104 to 107, 125, 140, 143, 144, 145, 150, 152, 155 to 159, 187, 188, 195, 202, 207, 209, 337, 339, 342, 343, 371 to 390.

May 8, '55, Issue of July, '54 No. 146.

May 8, '55 Issue of December, '54, payable Covington, Nos. 75, 105, 106, 107, of \$1,000.

May 29, '55 Issue of December, '54, payable Covington, Nos. 65, 66, 67, 110, 111, of \$1,000.

May, '55, Issue of December, '54, payable Covington, Nos. 1, 3, 4, of \$1,000.

June 2, '55, Issue of December '54, payable Covington, Nos. 12, 14, of \$1,000.

June 14, '55, Issue of December, '54, payable Covington, Nos. 15 to 20, 112, 113, 117, of \$1,000.

June 29, '55, Issue of February, '55, Nos. 135, 138, to 245.
“ “ “ “ “ “ December, '54, payable Lexington,
Nos. 13 to 18, of \$1,000.

June, '55, Issue of December, '54, payable Covington, No. 44.

July 6-10, '55, Issue of December, '54, payable Lexington, Nos. 22 to 29, of \$1,000.

July 6-10, '55, Issue of Feb., '55, Nos. 185, 231, 237, 244, 245, 246, 255 to 258, 261 to 263, 341 to 343.

July 13, '55, Issue of December, '54, payable Lexington, Nos. 45, 56, of \$1,000.

July 13, '55, Issue of July, '54 No. 338.

The issues of July, 1854, and February, 1855, are of \$500 each, and as the series in both of these issues are numbered consecutively, it is unnecessary to name the place of payment—the bond being sufficiently identified by its number.

The foregoing list I believe to be approximately correct, though it is, of course, not to be regarded as unalterable in any respect.

W. A. DUDLEY.

CLEVELAND R. R. CONVENTION.

WINTER TIME TABLES FIXED.

CLEVELAND, October 19.

New York and Chicago westward bound trains leave New York at 7 A. M. and 5 P. M. Leave Boston at 8:30 A. M. and 3 P. M. Arrive at Buffalo 11:30 P. M. and 11:30 A. M. Arrive at Chicago 10:30 P. M. and 10:30 A. M. Cincinnati trains leave Cleveland 7:45 A. M. and 7:50 P. M. Arrive at Columbus 1:15 P. M. and 1:50 A. M. Leave Columbus 1:45 P. M. and 2:30 A. M. Arrive at Cincinnati 6:30 P. M. and 7:45 A. M. From Cincinnati—Leave Cincinnati 9 A. M. and 11:30 P. M. Arrive at Columbus 1:50 P. M. and 4:20 A. M. Leave Columbus 2:20 P. M. and 4:35 A. M. Arrive at Cleveland 8:20 P. M. and 10 A. M. The time to Pittsburgh and Bellair is not yet accurately fixed, but may be inferred from the Columbus time. It is quite probable that the time of the first train east from Cincinnati may be fixed at 10 A. M., and that the arrival of the first train at Cincinnati from Columbus may be fixed at about 6 A. M. No other changes are likely to be made. This schedule is to take effect on Monday, November 14th. The trains from New York via Philadelphia will leave at 7 A. M. and 6 P. M. Their arrival time at Cincinnati and Chicago will be the same.

The following resolution was next adopted by the Convention:

CLEVELAND, Oct. 19.

Resolved, That the following rules in regard to free passes shall be strictly observed by all roads represented at this Convention, on and after this date: *First*, Each company may issue annual or time passes to the President, Acting President, Vice-President, (when an active and salaried officer,) Superintendent, and Traveling Agent of such company, as it may have, pursuant to ticket or freight arrangements; with, also, two tickets to be issued to the company, as such, to be used under the control of the President and Superintendent for business purposes; also, not to exceed two passes to each daily paper and one to each weekly paper printed in the counties through which the road may run; and all free tickets heretofore issued to persons other than those designated in this section, to continue beyond the first day of January next, shall be invalid from and after that date.

Second, Passes may be issued to drovers accompanying their stock, not to exceed in number one for two cars, two for over two and under six cars, three for five and under ten cars, and four for ten cars and over, and return.

Third, No passes, other than above provided, shall be issued, except under the recorded orders of the Board of Directors of each road for purposes purely local to such road, but no passes shall be issued the effect of which will be to influence cattle or freights as against any competing road or roads.

Fourth, No road shall pass any person or persons over its line upon the pass ticket of any other roads, or the letter or request of any other road; nor shall any such letters be given.

Fifth, Half fair arrangements may be made for the Fourth of July, to State Fairs and to the National Fair, on the roads terminating where such National Fair is held.

Resolved, That it is the sense of this Convention that the free pass system be totally abandoned from and after January 1st, 1860.

—New York Central, Erie and Pennsylvania Central have advanced the rate for flour from Chicago to New York, five cents per barrel.

GREAT SALE OF RAILROAD LANDS. 40,000 ACRES Of the Finest Arkansas Lands, at PUBLIC SALE.

Pursuant to an order of the Board of Directors of the Little Rock and Fort Smith Branch of the Cairo and Fulton Railroad Company, made on the 8th day of June, 1859, 40,000 Acres of Land will be offered for sale at the Office of said Company, in the city of Van Buren, Crawford County, Arkansas, on

MONDAY, THE 14TH DAY OF NOV., 1859,

and from day to day until sold, being about one half of the lands attached to the First Division of said Road. These lands are advantageously situated upon, and near the Line of the Little Rock and Fort Smith Branch Railroad, which is now being placed in course of construction. They comprise some of the most valuable bottom and uplands in Western Arkansas, and are situated in the Counties of Crawford, Sebastian, and Franklin, and are within twenty miles of the City of Van Buren, and within twenty-five miles of the City of Fort Smith. This Railroad traverses a part of the finest and richest portion of the State, and its completion within five years, will afford railway communication with every portion of the Union. Immigration to this State has been steadily increasing until the better part of the Government Lands are absorbed. The lands attached to this road were selected and confirmed years ago, and are now brought into market for the first time, and present inducements to planters and Farmers desiring to emigrate from the older States, and rare opportunities to Capitalists for safe and remunerative investments. The climate is unequalled by any portion of the Great West for salubrity and health; the soil is remarkably productive, and the country well watered and timbered. The Company are in condition to make good title to the lands now offered for sale.

TERMS.—One third cash; one third in six months; and one third in twelve months; notes to bear interest from date, at the rate of ten per cent. per annum, until paid. Full lists of these lands, and all desirable information concerning them, will be furnished on application, personally, or by Mail, to J. B. OGDEN, Secretary, at the Company's Office, in Van Buren.

JESSE TURNER, President.

Office of L. R. & F. S. Branch of C. & F. R. R. Co.
VAN BUREN, ARK., August 31, 1859. Oct. 20.

To Contractors having Capital.

THE MARYLAND AND DELAWARE RAILROAD CO. will receive sealed proposals until the 1st of December for the work and materials of fifty-three miles of Road; extending from its junction with the Delaware Railroad, at Sangena, Delaware, to Oxford, Maryland; forming the shortest connection between Philadelphia and Chesapeake Bay, at a point always unobstructed by ice, near the mouth of Great Choptank River.

The resources of the Company (which is free of debt,) consist of individual stock, State appropriations, and work already done; but they propose to make payment for the work now offered, principally in First Mortgage Bonds; which they are prepared to show will be a safe, interest paying and profitable investment.

Twenty miles of the Railroad are already graded, the entire line located and secured, and the nature of the work very favorable for Contractors.

A circular containing a map and profiles, with descriptions of the character, position, and resources of the road, will be issued about the 25th inst., and sent by mail on application to I. C. W. Powell, Secretary Maryland and Delaware Railroad Co., Easton, Md.; to whom proposals will also be addressed.

Oct. 20.

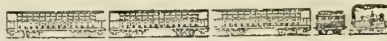
TENCH TILZHMANN, President.

WILLIAMS' CINCINNATI DIRECTORY 1860.

OUR Canvassers are now engaged collecting information for the CINCINNATI DIRECTORY for 1860, (Tenth Annual Issue.) The Directory for 1860 will be greatly improved over any former issue. It will contain, in addition to Cincinnati, Directories of Covington and Newport, a complete list of Post Offices in the United States, and many other improvements. It will be issued on the 1st of January. Subscription Price will remain as heretofore, \$2.

C. S. WILLIAMS.

194 Walnut Street.



NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith
Branch of the Cairo and Fulton Rail-
road Co., Van Buren, Ark., Sep. 10, '59.

SEALED PROPOSALS for the graduation of the First Division of twenty miles eastward from Van Buren, will be received at this office until **Thursday noon, December 1st, 1859.** The work is divided into twenty sections of about one mile each, and proposals for either a part, or the whole of this Division may be made; but no bids for less than one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise. Estimates of work done will be made on the first day of every alternate month, and payments made on the first day of the month following; and fifteen per cent. of all estimates will be retained until the completion of the contract. Contractors desiring other terms of payment may bid accordingly, as the above terms are not positively settled.

The Company having a large amount of the finest Lands in Western Arkansas, will give preference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications may be seen, and all desired information obtained, upon application at the Engineer's Office, in Van Buren.

JESSE TURNER, President.

NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith
Branch of the Cairo and Fulton R. R.
Co., Van Buren, Ark., Sep. 10, 1859.

SEALED PROPOSALS for the Masonry of the First Division of twenty miles eastward from Van Buren, will be received at this office until **Thursday noon, December 31st, 1859.** No bids for less than the amount of Masonry upon any one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise.

Contractors will state terms of payments, and proportions of money, stock and lands, and amount to be retained by the Company to secure the completion of the contract. The Company reserves the right to reject any and all bids at its option.

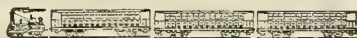
Plans and specifications may be seen, and all desired information obtained on application at the Engineer's Office, in Van Buren.

JESSE TURNER, President.

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANA OR SANDOVAL

FOR

Decatur, Springfield,
Bloomington, Peoria,
Burlington, Quincy,
La Salle, Rock Island,
Dixon, Galena,
Prairie du Chien, St. Paul, and
St. Anthony,
And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANA for all the above points.

Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via

PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all

TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and
Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,

Gen'l Southern Agent, Cincinnati.

W. P. JOHNSON,

Gen'l Passenger Agent, Chicago.

MOSELEY'S WROUGHT IRON ARCH BRIDGES —AND— Corrugated Iron Roofs ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.

Spt. 2.

MOSELEY & CO.

June 21, 1859.

Cincinnati, Hamilton and Dayton



RAILROAD.

FOUR TRAINS

LEAVE THE SIXTH STREET DEPOT DAILY

TRAINS RUN THROUGH TO RICHMOND, LIMA, SANDUSKY, AND DELAWARE WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND NORTH-WESTERN CITIES.

(Columbus time, which is seven minutes faster than Cincinnati.)

6 A. M. EXPRESS TRAIN—For Cleveland and Pittsburg, via Delaware, makes close connection at Crestline for Pittsburg, Baltimore, Philadelphia, and New York; and at Cleveland for Dunkirk, Buffalo, Boston and New York. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 7:30 P. M.; Quincy and Galena at 7 A. M. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Muncie. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

S. A. M. MAIL TRAIN—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STEAMER FOR DETROIT; at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at DELAWARE with the C., C. and C. Road, for Cleveland and points East. Also connects with Junction Railroad at Hamilton for Oxford.

4:30 P. M. TRAIN—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Also, connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago. Also connects with Junction Railroad at Hamilton for Oxford.

6 P. M. TRAIN—For Dayton, Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 8 A. M.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; at the new Ticket Office on West side of Vine street, between the Post Office and the Burnet House; or at the Sixth Street Depot.

D. McLAREN, Superintendent.

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circular which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the retort is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet,.....	\$300 00
do do do 350 ".....	335 00
do do do 400 ".....	375 00
do do do 500 ".....	450 00
do do do 600 ".....	525 00
do do do 700 ".....	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, also in operation in several States, apply to

R. T. COVERDALE,

167 Walnut Street, Cincinnati, Ohio,
who has the exclusive right to manufacture and sell in the State of Ohio.
Feb. 24th, 1859.

APPLEGATE & CO.,
Booksellers, Publishers, Stationers & Blank
Book Manufacturers,
43 Main St. Cincinnati, O.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Booksellers, Country merchants, Teachers, and others to our varied and extensive stock of School, Classical, Theological, Standard, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the principal publishers, as well as the manufacturers of Paper and Stationery, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

BOOKSELLERS,

Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, and Tea wrap-boards, Envelopes, Penholders, Copying Books, Ink and Scales, Sealing Slates, Mucilage, Book rests, Bill Envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files: Date Calendars, together with all other articles used in the counting-house.

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To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly paged, including all sizes, from the small memorandum to the large Super Royal Ledger, and variety of styles workmanship, order of any design, with or without ruling and durability of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

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We are prepared to Print and Bind books in and in any style desired, at rates as low as quality of work called for in this where. Our executing these branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Cards, Circulars, or other of printing, will that we do such jobs despatch. Orders re-

Stereotype of any description that may be desired, can be executed by our facilities for branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Cards, Circulars, or other of printing, will that we do such jobs despatch. Orders re-

Publishers,

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, *Clark's Commercial Dictionary*, *Bohn's Ancient History*, *Plutarch's Lives*, *Josephus*, *Spectator*, *Chain of Sacred Wonders*, *Familiar Science*, *Webb's Monitor*, *Solden's German*, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

43 MAIN STREET, CIN.

W. HARVEY'S SAFETY JOINT For Coupling the Ends of "T" Rails. PATENTED, NOV. 2, 1858.

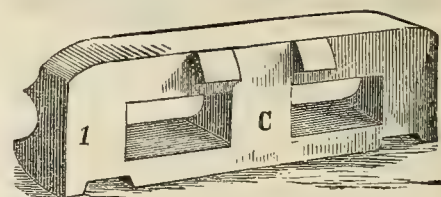


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

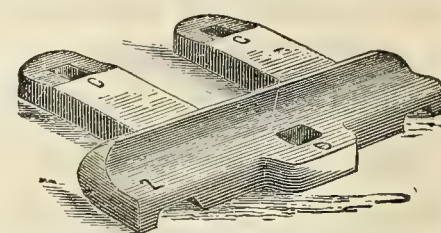
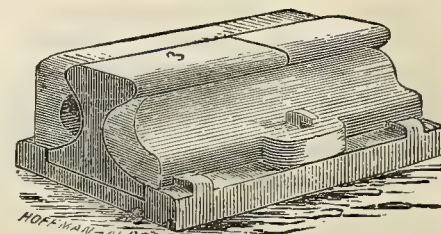


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues in slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that on one part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly afeer road, thereby doing away with the breaking of rails, wheels, and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear of the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
41 Jefferson-street, Albany, N. Y.
N. AGENT, Cincinnati O.

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

SOLE IMPORTERS.
PROSSER'S PATENT SURFACE CON-
DENSERS for high pressure steam, with sea or
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steel wire and whalebone brushes, pull lever wrenches,
tubes—plain or enameled, screwed together for Artesian
Wells, Hollow Slabs for various purposes, Steel for
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ARE PREPARED TO

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CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE,

WITH OR WITHOUT AXLES.

WHEELS FITTED

To Hammered or Rolled Axles,

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

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POST-OFFICE GUIDE!

For Post-Masters and Business Men.

CONTAINING

A Complete List of Post-Offices in the United States
and Territories, arranged by States and Counties; A
Complete List of all Distributing Post-Offices; Rates
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Printed Matter, Transient and Regular; Abstract
of the Laws and Regulations of the Post-Office De-
partment, &c., &c.

COMPILED BY E. PENROSE JONES,

Late Assistant Post-Master at Cincinnati.

Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.

U. S. BLANK AGENCY, CINCINNATI POST-OFFICE,
January, 1859.

This work has been carefully compiled and corrected by
E. PENROSE JONES, Esq., late Assistant Post-Master of the
Cincinnati P. O., from the Records in this Department, and
other sources, and contains the most complete list of Post-
Offices especially of the Western, North-Western, and
South-Western States, yet published.

MAHLON H. MEDARY,

Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an active pamphlet of about 100 pages.
The entire matter is kept standing in type, and as the com-
piler is promptly advised of all New Offices, Changes and
Regulations of the Department, the information is corrected
up to the last day of publication, an advantage possessed
by no other work of the kind.

OBSERVE, That this list is arranged by States and Coun-
ties, making it especially valuable to business men. No
similar arrangement has been published since 1856. There
are 3000 more offices in this than in any book heretofore
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SEWING MACHINES.

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We offer the Wheeler & Wilson Sewing Machine, with
important improvements, at a reduction on former prices;
and to meet the demand for a good, LOW-PRICED FAMILY
MACHINE, have introduced a *new style*, working upon the
same principle, and making the same stitch, though not so
highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALIKE ON
BOTH SIDES, impossible to ravel, and leaving no chain or
ridge on the under side, the economy of thread, and adap-
tability to the thickest or thinnest fabrics, have rendered this
the most successful and popular Family Sewing Machine
now made.

At our various offices we sell at New York prices, and
give instructions, free of charge, to enable purchasers to
sew ordinary seams, hem, fell, quilt, gather, bind, and
tuck, all on the same machine, and warrant it for three
years.

Send or call for a circular, containing all particu-
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WM. SUMNER & CO.

1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th
Corby, Gossin & Co.'s make, for sale very
low by
TRABER & AUBERY,
7 Public Landing

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

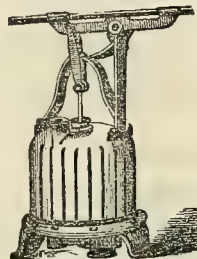
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite
the attention of RAILROAD
Companies, Manufacturer
Distillers, Miners, and the pub-
lic generally to these Pumps
as the best Pump now in use
and acknowledged by all who
have used them to be perfect-
are simple in their construc-
tion, compact, durable and not
likely to get out of order; well
adapted for Steamboats, Rail-
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Mines, Rolling Mills, Paper
Mills, Factories, Wells, Cla-
rooms, Stationary Fire Engines, Garden Engines and
all purposes where a Pump can be used. Also, for for-
cing a large body of water to a great height or distance
rapidly.

Also, McGowan's Patent Ball Valve Pump, designed
for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings,
Lead, Copper and Gas Pipe furnished at the lowest ma-
rket prices.

Full and perfect satisfaction guaranteed in all cases,
when properly put up according to directions.
Orders thankfully received and promptly filled at the
shortest notice.

SILVER MEDAL. (The highest prize) awarded
the Compound Steam Pumping Engine at the late Fa-
Ohio Mechanics' Institute. June 18, 1855 —1

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co.,
Pennsylvania, are prepared to execute orders for Street and
other Rails on terms favorable to parties wanting to pur-
chase
Ag. 4, m. 6.

FREEDOM IRON COMPANY,

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods,

Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Millin Co., Penn.

JOHN A. WRIGHT, Sup't.

This Iron is all made from best Juniata cold-blast char-
coal Pig Iron, refined with Charcoal in the old-fashioned
Forge Fire, hammered into a Bloom from which Iron is
hammered. The whole operation from ore to finished Iron
is conducted at our own Works. June 9.

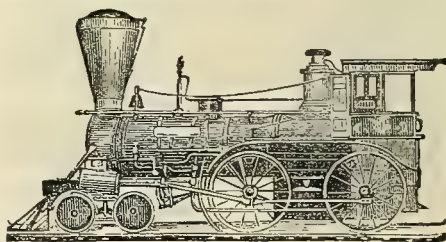
New Time Table

OF THE

NEW YORK CENTRAL R. R.

	Leave Albany.	Arr. Buffalo.	Arr. S. B.
Steamboat Exp.	7 00 A. M.	7 00 P. M.	7 00 P. M.
Mail	9 00 A. M.	12 50 A. M.	
New York Exp.	11 15 A. M.	9 00 P. M.	9 00 P. M.
Night Exp.	5 00 P. M.	4 00 A. M.	4 00 A. M.
Utica Accom.	6 00 P. M.	Ar. U. 10 00 P. M.	
N. Y. Mail	11 15 P. M.	10 00 A. M.	10 00 A. M.
	Leave Buffalo.	Leave Bridge.	Ar. Alb'y
New York Exp.	5 15 A. M.	5 15 A. M.	3 30 P. M.
Steamboat Exp.	8 00 A. M.	8 00 A. M.	8 00 P. M.
Mail			2 30 P. M.
Cleveland Exp.	6 00 P. M.	6 00 P. M.	4 40 A. M.
Cincinnati Exp.	11 00 P. M.	11 00 P. M.	8 30 A. M.
Utica Accom.			10 00 A. M.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotiv
equal in efficiency and durability to the best Eastern
manufacture. Also, Shaping and Slotting Machines
suitable for railroad shops. Also, all kinds of heavy
forging and casting done at short notice. Also, bolts for
bridges cut with dispatch.
ap.20

MOORE & RICHARDSON.

THE KENTUCKY MILITARY INSTITUTE

DIRECTED by a Board of Visitors appointed by the
State, is under the superintendence of Col. E. W.
MORGAN, a distinguished graduate of West Point,
and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges
but more extended in Mathematics, Mechanics, Ma-
chines, Construction, Agricultural Chemistry and Mining
Geology; also in English Literature, Historical Read-
ings, and Modern Languages, accompanied by daily and
regulated exercise.

Schools of Architecture, Engineering, Commerce,
Medicine, and Law, admit of selecting studies to suit
time means, and object of Professional preparation, both
before and after graduating.

The twelfth annual term is now open. Charges, \$102
per half-yearly session, payable in advance.
Address the Superintendent, at "Military Institute,
Franklin Springs, Ky.," or the undersigned.

P. DUDLEY,

President of the Board

Jan 5th.

The Railroad Record.

E. D. MANSFIELD, - - - - - } Editors.
T. WRIGHTSON, - - - - - }

CINCINNATI:

Thursday Morning, Oct. 27, 1859.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

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A square is the space occupied by ten lines of Nonpareil.

One square, single insertion,.....	\$1 00
“ “ per month,.....	3 00
“ “ six months,.....	12 00
“ “ per annum,.....	20 00
“ column, single insertion,.....	5 00
“ “ per month,.....	10 00
“ “ six months,.....	40 00
“ “ per annum,.....	80 00
“ page, single insertion,.....	15 00
“ “ per month,.....	25 00
“ “ six months,.....	110 00
“ “ per annum,.....	200 00

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THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

IF The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

MISSISSIPPI AND TENNESSEE RAILROAD.—At a meeting of the New Board of Directors of the Mississippi and Tennessee Railroad Thursday evening, all the old officers of the road were re-elected for the ensuing year, as follows: *President*, F. M. White; *Secretary and Treasurer*, C. F. Vance; *Superintendent*, R. Hough—all tried, efficient and popular officers.

THE SOUTHERN PACIFIC RAILROAD.—Dr. Fowlkes proposes—and this proposition has the sanction of Mr. Thomson—to sell one million five hundred thousand dollars of the stock of the company to purchase one thousand laborers for the construction of the road through Texas. Of this sum \$500,000 has been allotted to Texas, and \$100,000 was subscribed within a week after the election of the new directors. Full confidence is entertained by Dr. Fowlkes, and is expressed by the friends of the road in Texas, that \$500,000 will be speedily subscribed by its citizens—a result pregnant with favorable results to the company. To the public and stockholders out of Texas \$100,000,000 of the stock is offered. Within the next six days, it is believed, a large portion of this amount will be subscribed. A thousand dollars of the stock was taken at par in this city yesterday. This money, to be invested in labor to construct and work the road, is not sunk when invested.

THE POPULATION OF THE UNITED STATES, AND CENTER OF POPULATION.

In modern times, when Statistics have become a Science, and their value appreciated, the growth of Empires is watched with great interest. This growth consists of Population, Industry, Commerce, Wealth, and Education. Of these, population is the first in importance, as the others are all incident to that. It is now well ascertained, that the Empire of Russia and the Republic of the United States are the most speedy growing nations, and promise before long to be the most powerful upon earth. As they are under very opposite kinds of governments and institutions, the main cause, no doubt, is the extent of their lands, or the sparseness of their population, which admits of extension for generations to come. Hence, we find in addition to natural population, in the United States, we have a constant immigration from Europe, which makes no inconsiderable increment in the general growth. In Russia, there is very little of this, and probably, this is caused both by its despotic institutions and cold climate. The United States, therefore, is the first and greatest nation of the earth, in the vigor of its growth. It expands with all the rapidity which natural increase, foreign immigration, and abundant lands for their support can give. It furnishes the finest example, yet exhibited in history, of the possible growth which our measure of civilization can afford. One thing very striking in this rapid growth is, that for a period of about seventy years, the ratio of that growth has remained nearly the same. This is extraordinary, because to produce the same ratio, the increments of annual growth must be immensely greater, so much greater, that the annual growth becomes unprecedented and astounding. This is the case with the United States now. In 1790, the decennial growth of the United States (in ten years,) was one million; but in 1860, it will be seven millions! This fact is, we believe, unprecedented in history, and we doubt whether it can continue many years; especially, as foreign immigration will be relatively less. However this may be, the subject of population in this country has proved one of great interest. The Geographer—DARBY—in his view of the United States, estimated the population for an hundred years, in advance, and taking the fixed ratio, which has been ascertained, come nearer the truth, than an ordinary observer would suppose possible. It is curious to compare his results, (which were made before the Census of 1830,) with the actual facts of the Census. We give them below in parallel columns, viz:

	Darby's Estimate.	Census.
In 1830.....	14,043,164	12,866,920
In 1840.....	19,335,810	17,069,453
In 1850.....	26,168,079	23,191,876
In 1860.....	35,167,708	

Mr. Darby's estimate is considerably above the fact; but is still near enough to show,

that there are fixed principles at work, which move on, with nearly uniform force. We said the ratio remains nearly the same; so it does; but we see that the principle to which we referred, that of a diminishing ratio, with the enlargement of increments has had some effect. Mr. Darby made his estimate on a fixed ratio; but, we see, that the actual result falls short of his estimate. It is curious that, the greatest part of his error is found in the Negro population, which he made in 1850, no less than 2,000,000 more than it turned out to be. The reason of this is probably, that the estimate for the whole population includes the immigration, which is very large, while this element does not apply to the blacks at all. Hence, in an estimate made in this way, the result will show nearly the tenth for the whites, but much greater than the tenth for the blacks.

The ratios of increase for white and colored population, since 1790, is as follows:

	White.	Negro.
1790 to 1800.....	34 per cent.	31 per cent.
1800 to 1810.....	37 “	37 “
1810 to 1820.....	33½ “	29 “
1820 to 1830.....	33 “	30 “
1830 to 1840.....	33 “	24 “
1840 to 1850.....	33½ “	27 “

It will be seen, that from 1810 to the present time, the colored population of the United States has increased at a much slower rate, than that of the whites. The difference is mainly caused by immigration, which, at an average rate of 150,000 per annum, has caused a much greater increase of population in the whites, than could have been, by the increase of births, or, could prevail among the negroes. Taking now the ratio of increase in the whole population, we have this:

From 1790 to 1800.....	34 per cent.
“ 1800 to 1810.....	37 “
“ 1810 to 1820.....	33 “
“ 1820 to 1830.....	33 “
“ 1830 to 1840.....	34 “
“ 1840 to 1850.....	36 “

From 1820 to 1850, the increase of the entire population has been a little over 34 per cent. As the immigration from 1850 to 1856 was very large, we may estimate the increase from 1850 to 1860 at the same rate; or, 3/4 per annum. This gives for 1859, an increase of 30.6; which amounts to an increment of 7,096,400—or a present population of 30,287,776. In 1860, it will be 31,075,266. Calculated from the year 1800—sixty years—this is equivalent to doubling in each twenty-three years; and if we may suppose this process to go on, it will give 62,000,000 of people in 1883, and 125,000,000 in 1906. This is far enough to go. Looking to the combined results of population, territory, and civilization, the United States will then be the most powerful nation of the earth.

There is another question, connected with population, of great interest. Where is the center of population? We have seen various statements on this head, but none of them exactly correct. It is easily ascertained, however. Pass a line through the United States, East and West, so that one half the population

shall be on the North, and one half South of it. Then pass another line North and South, so that one half the population shall be East, and the other West. The intersection of these two lines will be the center of population. It is true that some irregularities in the circumference of population may slightly vary it; but very slightly. Comparing the Census with the map, we find, that in 1850, the East and West line was very nearly on the Southern line of Pennsylvania, and the North and South line very near the West line of Pennsylvania. In other words, in the year 1850, the *center of population* of the United States was on the South-west corner of Pennsylvania. It progresses about three miles per annum, nearly due West. There is, therefore, no doubt, that it is now just about the Ohio River, near Marietta, at the spot where the first settlement of Ohio was made. At that time, the center of population was in York County, Pennsylvania; so that since the first settlement of Ohio was made, at that time, the center of the American Republic has moved nearly three hundred miles due West. It has crossed the Alleghany, and is now moving slowly along the Eastern slope of the Mississippi Valley. For a long time the great center of the Union will be in the State of Ohio; which will have the honor of being the real Keystone of its great and mighty arch.

It is pleasant, as well as curious, thus to notice the grand, steady March of Empire; not by conquest, not by the plunder and destruction of other nations, but by the peaceful accretions made by nature, industry, and commerce. As these millions have come up and filled the land, their industry has supplied their wants; the excellence of their institutions have attracted other nations; and the magnificent structure of a peaceful and harmonious empire is produced before the wondering eyes of mankind.

ANNUAL CONVENTION OF GENERAL TICKET AGENTS.

The annual meeting of General Ticket Agents met at the Spencer House, in this city, on yesterday. The following is a list of

DELEGATES PRESENT.

W. L. St. John, General Ticket Agent, Chicago and Rock Island.
C. P. Oakley, General Ticket Agent, N. O., Jackson and Great Northern.
J. A. Burch, Representative, Hannibal and St. Joseph.
P. B. Groat, General Ticket Agent, Hannibal and St. Joseph.
Samuel E. Corry, Mississippi Central.
T. A. H. Smythe, Peoria and Oquaka.
L. L. Hout, Penn. Central.
T. C. Hanford, Master of Transportation, Northern Missouri.
J. J. Houston, General Ticket Agent, Pitts., Fort Wayne and Chicago.
D. P. Phelps, General Ticket Agent, Southern Michigan.
A. J. Field, General Ticket Agent, Louisville and Nashville.
Thomas Lough, General Ticket Agent, Ohio and Mississippi.
Wm. R. Gough, General Ticket Agent, St. Louis, Alton and Chicago.
H. Q. Sanderson, General Ticket Agent, Terre Haute, Alton and St. Louis.
J. H. Lindsey, General Ticket Agent, Lafayette and Indianapolis.
J. W. Cary, General Ticket Agent, Cleveland and Erie.

Charles Wood, General Ticket Agent, Terre Haute and Richmond.
B. C. Goodall, General Western Agent, Toledo, Wabash and Western.
W. A. Wolfersberger, Chief Clerk Penn. R. R.
G. C. Hachaway, Assistant Ticket Agent Pittsburg, Fort Wayne and Chicago.
Mr. Cohen, Representative Hudson River R. R.
H. J. Spalding, General Passenger Agent, Michigan Central.
Charles E. Noble, General Passenger Agent, Michigan Central.
B. Fell, General Ticket Agent, Buffalo and Lake Huron.
T. D. Hall, General Passenger Agent, Grand Trunk Railroad.
John W. Brown, General Ticket Agent Central Ohio.
E. J. Fuller, General Western Representative Baltimore and Ohio.
J. F. Boyd, General Ticket Agent, Bellefontaine Line.
Ira D. Hutchinson, General Ticket Agent, Steubenville Line.
Thomas Frazer, General Ticket Agent, Michigan Central.
W. J. Dill, General Ticket Agent, Sandusky and Newark.
J. M. Kimball, General Ticket Agent, Milwaukee and Minnesota.
W. H. L. Noble, General Ticket Agent, Indianapolis and Cincinnati.
H. H. Porter, General Ticket Agent, Galena and Chicago Union.
C. A. Wilson, General Ticket Agent Great Western of Illinois.
Samuel Powell, General Ticket Agent Chicago, Burlington, and Quincy.
F. K. Myers, General Ticket Agent, Cleveland and Pittsburgh.
G. W. Bartlett, General Ticket Agent, Toledo, Wabash and Western.
H. Parrott, General Ticket Agent, Indiana Central.
H. C. Marshall, General Ticket Agent, Cleveland and Columbus.
B. W. Wallace, General Ticket Agent, Pacific and Missouri.
Julius Movius, General Agent Great Western of Canada.
P. W. Strader, General Ticket Agent Little Miami.

BUSINESS COMMITTEE.

The following named gentlemen were appointed a committee to prepare business for the Convention:

H. C. Marshall, Ira A. Hutchinson, John J. Huston, Thos. Frazer, Samuel Powell.

This committee almost immediately reported the winter tariff of passenger rates adopted at the last Chicago Convention. This tariff provides for only a slight advance over summer rates. Definite action on the subject of rates was deferred until to-day.

COVINGTON AND LEXINGTON R. R.

EDS. COM:—The article you published yesterday, advocating the sale of this road, is right in feeling and principle. The management of this road for years has been the subject of criticism among intelligent business men. The doctrine that a franchise shall not be sold, is something that honest men can not comprehend, though lawyers may. Years ago, in old Virginia, real estate could not be sold—only its rents and profits.

In the reign of Elizabeth in England, and previous, nothing except personal property could be sold. In those days the right to make soap and candles was a monopoly—as was everything else—granted to a few favorites and nobles that hung about and basked in the Sovereign's favors. The Courts of Law saw and regretted the injury done to the community, and with a view of diminishing the the evil effects as much as possible, of what they could not control, they held these monopolies granted to a few favorites were ROYAL FRANCHISES; that the emanated from the favor of the King, and could not be interfered with, and for that reason, could not be sold, but expired with the life of the person to whom they were granted. *That the favor of the Sovereign was something too sacred to be sold.*

It is on this principle that the charters of corporations have been held beyond the reach of Courts of Law. The common mind in our day—though more enlightened than the aristocracy in the times to which I have alluded—do not believe it just or right that franchises,

granted by the Sovereign, whether he be a King, or a Democratic Legislature elected every year by the people, shall not be subject to sale.

What is the spectacle in Ohio arising out of the principle that franchises of corporations are something too sacred to be touched or interfered with in a Court of law?

We have in Ohio over 3,000 miles of Railroad, about one third as much as exists in France, with a population of forty millions of people; while we have not over three millions of people. Most of these Railroads Companies are insolvent and bankrupt. No greater injury can afflict society than the presence of an insolvent corporation. Ordinary common sense comprehends this, and the instincts of every one responds to it. Yet our Courts in Ohio have recently decided that a Railroad shall not be sold, though it is bankrupt, and can not comply with its contracts. Yet we see the ruined merchant daily drawn up and tortured in open court by the application of the *Thumb Screw Law* to make him disclose what he has done with his last dollar, before he is turned loose on society to beg or to starve.—Is this right? We know it is not. If all our bankrupt railroads were sold out as other mortgaged property has to be, when its owners become insolvent, public morals in Ohio would be benefited. Mr. Van Buren, in the crisis of 1837, recommended to Congress the passage of a bankrupt law, as did Mr. Buchanan in 1857, which should apply only to corporations. The U. S. Government well knew that the State Legislatures were not equal to grappling with organized bankruptcy, such as arises in a crisis like that of 1837 and 1857. They felt that the power of Congress should be applied to the emergency. We have something like this in the matter of the Covington and Lexington Railroad. It is insolvent and bankrupt, the figures and calculations of the correspondents of the Gazette to the contrary notwithstanding. That one of their Directors has purchased up the bonds of the company for a trifle, with a view to fortify himself when he would be compelled to purchase the road, which he would, as he saw, have to do in self-defense, is nothing compared to the existence of a bankrupt and irresponsible corporation, and which our conservative Kentucky neighbors specially detest. It is said that the have sold out most of their Railroads, which has prevented them having many. It would have been better for Ohio if we had done the same, and had not half the miles of rail now in use, and what we did have paid something to their owners, that the attention of competent business minds should be directed to their management.

The Covington and Lexington Railroad has had a fair trial in a court of equity. Judge Goodloe, who presided, is well known not only as an able lawyer, but as an upright and independent man of strong common sense. He will probably confirm the sale of the road which has been made, and which should be confirmed, not only on ordinary principles of equity, but as a matter of expediency and public policy. The sale was a fair one. There were three strong parties in the field bidding for the road, acting independently, without any combinations. As you stated yesterday the demand of \$800,000 was made in June, 1851, to repair the road. It roused the bondholders—they became indignant and brought suit to sell the whole concern. In December following, the stockholders knowing that a crisis existed; that the interest on their bonds was not paid and not likely to be; that a suit was then pending to sell the road, not only refused make an assessment of two dollars a share which was proposed in a public meeting of the stockholders, but they re-elected the same directory that had de-

manded the \$800,000, and who had told them they would do nothing, that their stock was used up.

In equity and in law the stockholders are stopped from resisting the consequences that have followed. Such stockholders should be wiped out and the work go into the hands of its real owners, who will have an interest in taking care of and extending it and promoting the interests of Kentucky and

CINCINNATI.

—*Cin. Commercial.*

THE PLATTE COUNTRY RAILROAD.

The following extract and communication we take from the *St. Joseph Gazette*, of Sept. 30th, and which should be read and pondered upon by all and everybody in this section of the State. If ever we expect to have a railroad, it is high time we were taking steps for its commencement and completion—we have waited long enough the motions of others, and now that the opportunity offers itself, it is our time to take a hand in the matter, and show what we can do and will do, for our necessity demands it. You farmers, merchants, mechanics, and everybody else, who are immediately interested in this, read the following and act accordingly:

The work upon the division north of this city is being pushed forward as fast as possible, and all laborers who are willing to work can get employment upon it at fair rates. Already about six miles of the road are graded and nearly ready for the ties, and we understand the company intends having several miles completed as soon as practicable. An engine and construction cars will be placed upon it immediately after the iron arrives in this city, which is looked for every day.

A few months ago our friends in Iowa, and particularly at Council Bluffs, were talking loudly about completing their end of the road to the line, and stated that the only thing which kept them from going to work at once was the inactivity displayed by those who had the matter in hand in this city. Now that we have given them evidences that the work upon this end is to be completed, as soon as the nature of the case will admit, we hope that they will make good their promises and commence at once the construction of the road through that State. If the people of Iowa will be true to themselves, and do their duty, in eighteen months from this date, Council Bluffs will be connected by iron bands St. Joseph and the East.—The time for talking is past, and money and labor are now required to push it through. Unless Council Bluffs takes steps at once to commence the road from that city, some more favored point near the line will be the terminus of the road, for a time at least, which will reap the advantages that will accrue to their city, if the road is completed the entire length.

The grading from here to Atchison City is about completed, and we are informed by those who have charge of the road that the track laying will be commenced in a few days. Between Atchison City and Weston, some six or eight miles are now graded, and we understand the company has promised, in the event that Platte county should subscribe the \$150,000 stock which the County Court has ordered an election upon, in October, that the road shall be completed to Parkville in eighteen months.—From the very best information received from Platte county, we feel no hesitancy in saying that the stock will be subscribed, and we can safely predict that in less than two years the road will be completed from the Iowa

line, at least to Parkville, and, perhaps, to Kansas City.

PLATTE COUNTY R. R.—With pleasure we give place to the following communication of Mr. Andrews in response to our remarks yesterday in regard to the Platte County Railroad. We are glad to learn that the people of Iowa are awake to their own interests, and assure them, unless we are deceived in the matter, the shaking hands will actually take place, if it depends upon our end of the road being completed in the time specified:

ALLEN HOUSE, ST. JOSEPH, MO., }
September 30th, 1859.

EDS. GAZETTE—*Sirs*:—I notice in this morning's issue of your paper, an article headed "The Platte County R. R.," to which I take great pleasure in answering, as far as regards Council Bluffs and the upper country.

I am a resident of Council Bluffs, and in speaking myself, I speak the sentiments of all the people from the State line to Council Bluffs. As you remark, it is true that it has been the inactivity displayed by those who have the building of the road from St. Joseph to the State line, that we have not been more active in our work. The great question has been, was it policy to do a large amount of work, perhaps to lie in an unfinished condition for years? Policy dictated that we should wait until we should be sure of an early connection with the St. Joseph road at the State line.

I am now fully satisfied that the gentlemen who have the matter in charge here are determined to push the work through to the State line, and I return to Council Bluffs with such information that will wake every man up to their interest and duty. I pledge myself, with the whole country from the State line to Council Bluffs, that you shall not wait an hour at the State line, but we will shake hands with you in eighteen months, if you say so. We are able and willing, and will build the the road.

Respectfully, Yours,
J. S. ANDREWS.

[From the Charleston Mercury.]

THE BLUE RIDGE RAILROAD—ITS ADVOCATES AND ADVISERS.

NUMBER II.

Very powerful appeals have been made to the Legislature of South Carolina, in order to induce that body to take an important step—one that, we think, would not meet the approbation of the tax payers of the State. Many eloquent speeches have been made before that body by highly respectable and distinguished gentlemen, who, we believe, to be honest, but who have permitted their zeal to run them into extremities, and, unlike wise statesmen, to speak at random about what other States have done, to place them ahead of South Carolina in the advancing enterprises of this age of progression. We have searched in vain, and can not find a single State that has erected public works outside of her own borders, and we can find but one State which has carried out a successful railroad enterprise, namely—Georgia.

The city of Boston has made a net work of railroads, which traverse nearly all New England, with little or no aid from the State of Massachusetts. The citizens of New York had a long struggle with the politicians of that State before they could obtain a charter to build railroads that would compete with the great Erie Canal. The struggle ended in

success, and that city has expended over a hundred millions, in order to draw trade from the Lake country and the Valley of the Mississippi.

Pennsylvania comes next. She had incurred a debt of about forty millions in the erection of public works, and so involved herself that she at one time could not pay the interest on her debt. One of the works was a line of canals and railroads from Philadelphia to Pittsburg. These public works, in the hands of politicians, did not furnish the commercial facilities that were expected of them, and stood for a long time in the way of private enterprise. After New York began to realize the great advantage derived from her western railroads, it was found that Philadelphia was doomed to go far behind New York in commercial supremacy, unless she was allowed similar privileges. The State of Pennsylvania was in this way compelled to allow the people of Philadelphia to follow the people of New York. A charter was granted and a road built over the mountains to Pittsburg, when that road was completed at a cost of thirty millions (\$30,000,000) without State aid. It gave a great impulse to Philadelphia, and such a backset to the State railroad over the mountains, that it has been entirely abandoned; and a road, which first cost two millions (\$2,000,000), then three millions (\$3,000,000) more to make a tunnel through the mountain, and so change the location of the road as to avoid inclined planes, now lies an abandoned property—the iron taken away from it, and a tunnel half a mile long left to be the abode of wild beasts, and a standing monument of the folly of Pennsylvania, now in debt, and paying interest on the enormous sum of five millions, wrested by her politicians for this work alone.

Next comes the State of Maryland and the city of Baltimore. The Baltimore and Ohio Railroad was commenced simultaneously with our road from Charleston to Hamburg, and gives Baltimore an outlet to the West, not by any means as good as that which Charleston enjoys.

The Baltimore Road was built by private enterprise, the means furnished mainly by the city and citizens of Baltimore. That road cost twenty-four millions eight hundred thousand dollars (\$24,800,000), including three millions five hundred and thirty-eight thousand dollars (\$3,538,000) for rolling stock. To this great work the State of Maryland subscribed six hundred and eighty-five thousand six hundred dollars (\$685,600), and loaned the Company five per cent. bonds for three millions (\$3,000,000). Can we, with any sort of propriety, take Maryland for an example to prove that our State is behind the age? After our Legislature refused, positively refused, to release the private subscribers from conditions required of them, before the company could avail themselves of the million of dollars which had been conditionally subscribed by the State, there was a most earnest effort made to increase the individual subscription, which resulted in raising the amount to two hundred and seventy-eight thousand seven hundred dollars (\$278,700)—not quite enough to cover four items of expenditure that had accrued up to the 10th of November, 1858. By Judge Frost's report of that date, it appears that there had been paid for—

Engineering.....	\$152,663
Salaries, printing and law fees.....	59,384
Interest on mortgage bonds.....	33,347
Loss on the sale of bonds and stock.....	35,686

\$281,080

With a subscription of two hundred and seventy-eight thousand dollars (\$278,000) from

the citizens of Charleston—not enough to cover the above charges—the people of that rich emporium, the center of banking capital for the whole South-west, send her statesmen and influential merchants to Columbia to show the State how she can grow rich by building a great highway for commerce to the West.

These gentlemen had traversed the mountains and laid out railroads for the tax payers of the State to build, and assume to be the guardians of the sovereign State of South Carolina, and point out in most eloquent terms how she is to escape from the control of the slothful, who can not see that the building of a railroad to Tennessee is to check our downward tendency.

The State (so far as this grand project is concerned) is divided off into *patriots* and *fogies*, as was the case in 1821. We admire the zeal with which these patriotic gentlemen are driven forward by their over-zeal in a bad cause. They contend that the State is to be enriched by purchasing cheap bread and meat—forgetful of the wise maxim, that the farmer or any agricultural community that has to purchase meat and bread will, of necessity, grow poor. The moderate thinking men (termed by some people fogies) can not see that the State can be greatly benefited by building great railroads through other States for the purpose of bringing us agricultural products that every man ought to raise for himself; neither can they see that the State at large is to be benefited by bringing corn, wheat, and bacon from Tennessee farms to our towns and villages at cheaper prices and cheaper freights than our own farmers can afford to carry twenty miles and sell at. The so-called fogies think that the tendency will be to enhance the value of Tennessee lands and depreciate the value of our land.

Now, if a proposition were to be made to call on the State for half the sum that is to be expended on that worst of follies, the State Capitol, together with the millions that the Blue Ridge Railroad would absorb—we say, if a proposition were to be made to raise, by State aid, a few millions to drain and put our great swamps in a state to be cultivated, those crazy railroad patriots would meet you at every corner with objections, and ridicule the folly of such an undertaking. Commerce and a great commercial city is their hobby, and they would raise objections to any such step, although it must be apparent to all thinking men that the improvement of our swamps and waste lands will be the means, and the only means, that can be used to raise our State to the position that the patriots so commendably and earnestly desire. A cultivated back country is absolutely essential, as much, and more so, than railroads, to the growth and prosperity of a commercial city. We have thousands of acres in South Carolina that ought to be brought into cultivation, that would produce more corn and bacon for South Carolina's consumption than we can ever afford to bring from the West, besides, possibly, doubling the cotton crop of the State; and what is more important still, it would stay the tide of emigration that is carrying away our wealth and population, while building railroads to bring to us agricultural supplies will only increase our poverty and drive away the wealthy and enterprising planters from the State, and leave us a poorer class of yeomanry to scratch our poor worn-out fields, and assume the responsible duty of paying the principal and interest of the bonds which we are so freely making and so injudiciously spending the proceeds.

Those patriotic gentlemen, guardians of the welfare and of the honor and high character of our State, warn us of the danger of going behind, and exhort us, at every hazard, to hold our position, cost what it may. They remind us that our first great duty is to build up our ancient commercial emporium, while its own citizens must admit that they have not sufficient energy and liberality to help themselves, and keep from going out of sight behind in the race for commercial supremacy.

Congress has never been beset by lobby members more anxious and busy than those who have attended our Legislature for the last five years for the purpose of prevailing on the State to embark, almost single and alone, in this visionary project. There has been a high prize at stake; and it is not surprising that the Legislature is boldly warned of the improbability of obtaining office or political favor for an individual who, unfortunately, ranks with the fogies. Good eating and good cheer is tendered with unexampled freedom—all things are promised by all men.

The citizens of old Edgefield, always heretofore considered sound to the core, are led to believe that they are to get a railroad through the town or village of Edgefield. Then again the Saluda side of the district are to have a railroad from Ninety-Six to Aiken; the Savannah river side of the district are to see the terminus of the Blue Ridge Road pass down the Savannah river to Augusta; the Barnwell and Colleton people are to get a road from Augusta to Salcahatchie Bridge and to Beaufort village.

If the people of Edgefield, Barnwell and Colleton, will only allow themselves to reflect, they will see the utter fallacy of our being benefitted by large expenditures of State credit for works out of the State, and that it is our policy to reserve her credit to aid in building roads within our limits.

We want a road to lead from Cheraw to the North Carolina line, in the direction of the North Carolina coal fields; one from Augusta to Beaufort; one from Columbia to Hamburg; one from Ninety-Six to Aiken; and one from Anderson or Abbeville to Hamburg; and the only necessary State aid to build them will be to keep the State from running into debt for a work that will absorb so much capital that her railroad debt, connected with that which is being made for the new State Capitol, will deter her for many years from helping useful and necessary works that we really must have, in order to keep us in the commercial and agricultural position that will enable us to keep company with other States—which object seems to be so earnestly desired by the *patriotic* Blue Ridge advocates.

Now, one of the parties from Charleston, who has ably fought for this great prize, is said to be worth a million of dollars, and has subscribed no more than was actually required by law to give him a seat as a director, and a hand in directing the disbursement of the State's money.

Another gentleman, said to be worth three hundred thousand dollars, we believe, has not taken a dollar of the stock of the Blue Ridge Company; his burning eloquence has carried many a member far away from his line of duty to his constituents.

Now, if those gentlemen had gone up to Columbia,—one with his name down for a hundred thousand, and the other for twenty-five, backed by other large sums, and a general subscription from the merchants of Charleston—we might more easily tolerate their overbearing persistence in appeals to the Legislature.

After making speeches for a week, and getting up a terrible whirlwind, the vote is taken merely to know who are *patriots* and who fogies. If the majority be against them, a reconsideration must of course be had, and a day and night allowed to work on the wavering, when the vote is again taken; the patriots prove to have gained some six or eight votes—very encouraging; another reconsideration is begged, and allowed from the fogies; on the next ballot, the patriots are found to have touched the right chord, and carry the bill by one vote.

Thus the State, so far as the house can go, is in for a vast expenditure by one vote, and that possibly a bought one.

The Legislature of South Carolina, in 1854, went into this scheme with great reluctance, moved by pledges from the clamorous set that she would not be asked to do more. But for those pledges the bill could not have passed. Yet, in less than two years after, these same patriotic gentlemen go to Columbia to battle for carrying out the original design of getting the State in for the whole work—with all the extensions necessary to render it complete in all its parts. It was said, get the State in for two millions, and the third will be easily obtained. When in for three millions, two more must, of necessity, go to save the three—so that the beginning has no end short of putting the State Treasury and the State's credit in the hands of those self-constituted guardians, to be used *ad libitum*. If these gentlemen are allowed to rule the State, so long as the State bonds can be disposed of, Charleston may lie still and have railroads built for her. And it would not surprise us to hear an argument set up, that Carolina State Railroad works will not pay without more lines of steamers. The State having undertaken to build commercial roads and commercial emporiums without the aid of mercantile capital and enterprise, will, of course, have to respond to the call, and in that way endeavor to render her badly located and badly managed railroads profitable sources of income.

We are an impulsive people—apt to be led away with grand undertakings, rather than plod along in regular progressive and general improvements. Instead of taxing ourselves for ready money to build a new Capitol, to cost three hundred thousand dollars (\$300,000), that would have given us a building that almost any other State would have been satisfied with, we must go in debt for the money and erect one to cost three millions (\$3,000,000).

In 1824-5 we were engaged in a general system of internal improvements. After expending nearly two millions and a half (\$2,500,000), the whole project was abandoned, and that large sum of money sunk; and we may now see finely cut granite stones, that were built into canal blocks, used for foundations for corn cribs and barns.

In 1856 we again embarked with much zeal in a project to build a great double track railroad from Charleston to Cincinnati, which would have cost at least twenty-five millions (\$25,000,000). Fortunately for the State, the fever subsided, and we wound up the scheme by building a single track to Columbia, which could have been carried over a better and shorter route, and for less than half the money expended on it, if the people of Columbia had been left to build it themselves, unaided and uninfluenced by politicians.

We are now afflicted with a raging mountain railroad fever, which, we trust, will cool off, and end in adding another short link to to our South Carolina railroads. The State,

in this case, may, by acting as a discreet individual would do, make the best use in his power of a bad investment.

This, at least, would be the course pursued by
A Foggy.

LOCOMOTIVE ADHESION AND STEEP GRADIENTS.

On the reading of Mr. Isaac's paper, in November last, at the Institution of Civil Engineers, there was a perceptible appearance of incredulity upon the statement that a locomotive, with tender and a loaded wagon attached, had worked successfully, and for some time, up a gradient of 1 in 10. The weight of the entire moving mass—entire tender, and wagon,—was 49 tons, the gravity of which, therefore, must have been 4.9 tons. The friction was not, probably, as much as 6 of a ton, as at 20 lb. even per ton, it would amount to but 980 lb. The engine weighed, in running order, 24 tons on a level—the whole weight being on the driving wheels. On an incline of 1 in 10, however, it would be but nine tenths of this, or 21.6 tons. It was to be concluded, therefore, that an engine, having an available adhesive weight of 21.6 tons, had overcome a total resistance of 5.5 tons, equal to a trifle more than one quarter of the weight available for adhesion. It might be doubted whether the tractive power of the engine, or the force developed by the action of the steam at the peripheries of the driving wheels, would be sufficient to render such a high proportion of adhesion effective; but it appears that the engines in question had very large cylinders and very small wheels, to-wit: 19 in. cylinders, 22 in. stroke, and eight coupled driving wheels, each 3 ft. 7 in. in diameter. Taking, there-

fore, the formula $\frac{d^2 p l}{D}$, where d = diameter of cylinder, and D diameter of wheel, each in inches; l = length of stroke, in inches; and p = pressure in pounds per square inch, we have, with but 70 lb. of steam on each square inch of the pistons, 12,929 lb. of steam tractive force, equal to more than the assumed amount of adhesive power.

The question of the power of locomotives working upon steep gradients turns, therefore, upon that of the adhesion of the wheels upon the rails. Although engineers have been accustomed to refer with ridicule to Blenkinsop's notable contrivance for gearing the engine to the rails, few practical men, we apprehend, are aware of the actual adhesion of locomotive driving wheels. It is estimated variously at from one twelfth to one fifth of the insistent weight, or the weight exerted by such wheels upon the rails. That the proportion of the whole weight, usefully exerted in adhesion, is very capricious, every engine driver well knows. In some conditions of the rails it is difficult for the engine to start its own weight into motion upon a level. But with clean rails, there are many facts going to show that the adhesion of the wheels is even more than one fourth of the insistent weight. Morin found the friction of cast iron on cast iron, when wet, to be $\frac{1}{4}$ of the weight by which the surfaces were pressed together. The friction of pear tree on cast iron was $\frac{1}{7}$ of the weight. The success of Robertson's frictional gearing, which appears likely entirely to supplant all systems of toothed wheels, shows how, also, with a modification of plane surfaces, metallic friction may be greatly increased, and with the peculiar form of the flanged surfaces of railway wheels it is probable that much of the "bind" relied upon in the frac-

tional gearing is brought into effective play. The form of the surfaces in contact has certainly much to do with their mutual friction, however the result may be affected or otherwise by the more area of the bearing surfaces. We have always been told that friction between surfaces of any given kind was dependent on weight only, and altogether irrespective of the extent of surface in contact. Yet every one who has observed the working of engines having, in one case, plain or cylindrical tyres on their driving wheels, and, on the other, ordinary flanged tyres, is aware that the latter, under conditions otherwise equal, have the greater available adhesion. We can not always determine the exact weight upon the driving wheels, since, under many circumstances, it varies considerably, when the engine is working, from the weight, carefully obtained, of the engine at rest upon a level weighing machine. It is very easy so to connect the engine and tender that a considerable portion of the weight of the latter shall bear upon the foot-plate of the former. Again, at the ordinary height of the coupling-bar between the engine and tender, the moment steam is applied a portion of the weight of the engine is lifted from the front upon the hind wheels. If we conceive the engine to be coupled to its train through a connecting link attached to a standard rising several feet above the foot-plate, any power applied, as is that of the steam, in the horizontal line of the cylinders and driving-axle, would have a tendency to tip the engine from its front upon its hind wheels. In ascending a gradient, say of 1 in 30, 1-30 of the whole weight may be altogether lost, since the engine would press upon the rails, even when standing still, with but 29/30 of its actual weight, as determined upon a level; but if the engine have driving-wheels behind, and bearing or leading wheels only in front, the base of the center of gravity falls farther behind upon an ascending gradient than upon a level, and consequently increases the weight on the hind wheels. So, too, the water in the boiler, if a constant total quantity be carried (and we may say that more is required in ascending a steep gradient than on a level, in order to avoid burning the forward ends of the tubes), the water runs backward over the fire box so much, indeed, that on a gradient of 1 in 66, the difference of the apparent height of the water in a boiler 16½ feet long inside, is 3 inches, and, on an incline of 1 in 10, nearly 20 inches. Even the strong discharge of steam from one or two large safety-valves on the boiler, perceptibly increases by the reaction against the air, the weight of the engine upon the rails—a circumstance which is not mentioned in order to attach any material importance to it, but simply because it is a physical fact.

But so far as we can know the weight upon the driving wheels of an engine, whilst it is at work, we may presume that the ultimate adhesion of the wheels, on clean rails, is at least one-third of the weight acting to produce adhesion. Carefully noted particulars of actual experiments were introduced into the discussion upon Mr. Isaac's paper—particulars which showed that the working adhesion had been found in some instances, to be from three-eighths to two-fifths of the weight upon the driving wheels, as weighed upon a level platform and at rest. Mr. Flachet, in an appendix to his paper recently read before the Institution of Civil Engineers in Paris, and of which we have commenced the translation in another column of the *Engineer*, quotes cases wherein the effective adhesion of the driving wheels, probably with the assistance

of sand upon the rails, was equal to one half of the insistent weight; and to show to what extent adhesion is dependent upon the form of the surfaces in contact, he also quotes the following case: In a straight line a gradient of 1 in 57½ was immediately succeeded by one rising at the rate of 1 in 40½; the former was laid with narrow convex-topped rails of an old pattern, the latter with broad-topped rails giving a good width of bearing. It was found in practice that the same engine would ascend, with a given load, with greater apparent ease, at least with less slipping and greater speed, on the steeper than on the lighter gradient. Yet the gravity of 1 ton, which, upon the latter gradient, was but 39 lb., must have been, upon the former, over 55 lb., and the united resistances of friction and gravity must have been, at the least, one third more on the gradient of 1 in 40½ than upon that of 1 in 57½.

If an engine, with all its weight upon coupled driving-wheels, has a tractive and adhesive power equal to two fifths of its whole weight, it would draw about 150 times its own weight upon a level, equal, with an engine of 25 tons weight, to a train of 3,750 tons. Upon a gradient of 1 in 10, such an engine would press with but 9/10 of its actual weight, and its adhesion would be reduced therefore from 40 to 36 of its weight; whereby it would take up the incline its own weight, and about two and a half times as much more, a 25 ton engine taking itself and a train weighing sixty-two and a half tons.

We by no means intend to imply that either of the results thus deduced has been ever accomplished. That they could certainly be effected, it is not essential that we should stake our opinion, whatever that may be worth, in asserting. But there is reason to believe that locomotives can exert much more propelling power than is commonly supposed. Many of our readers would at one time have believed it impossible that a locomotive could work successfully up the Oldham incline of 1 in 27 for 1½ miles. Competent engineers at one time declared that such a result could not be accomplished.

Modern railway practice is becoming more and more reconciled to heavy gradients. Their abstract disadvantage is palpable enough, but there are often many advantages in their adoption. A difference between gradients of 1 in 100 and 1 in 50 may become a difference of 25 per cent. of length in favor of the line on which the latter are adopted; whilst, with heavy gradients, the earth-work, bridging, and tunneling are likely to be very much less than where a flatter line is adopted. Again, the cost of locomotive power by no means forms the total working charges of a railway; and the increased wear of railway iron, and of rolling stock, consequent upon working heavy gradients, would often be more than offset by the interest upon the total outlay necessary to avoid them.

In France, M. Flachet has come out strongly against the scheme going slowly forward, under the authority of the Sardinian Government, for tunneling Mount Cenis. He proposes a line, upon the natural surface of the ground, across the Alps, and is prepared to defend the heavy gradients and sharp curves which would be necessary in carrying out such a plan. It is his wish to renew the discussion not only in France but in other countries, as to the working of lines so situated, and from his high professional position and great practical experience, we have no doubt his invitation will meet with a proper response.

We may allude, as *a propos* to the subject of the adhesion of driving wheels, to certain

experiments reported as having been recently made in America, "by Mr. E. W. Serrell by magnetising the wheels of locomotives, to cause them to adhere more firmly to the rails. An additional adhesion of upwards of 75 per cent. is said to have been obtained by the following method: The lower segment of the wheel is surrounded by a helix of copper wire, through which the wheel revolves, and, contrary to the generally received opinions, it was found that upon curving the helix into a segment the radius of which is equal to the diameter of the wheel, the point of greatest magnetic effect coincided with the contact of the wheel and rails. One wheel had south polarity, and its corresponding opposite wheel north polarity. The wheels magnetised in the experimental trial were $4\frac{1}{2}$ feet in diameter, and weighed 1,100 lb. each. On a very slippery rail 19 lb. of steam per inch slipped the wheels without magnetism; under the same conditions 35 lb. were required to slip them when magnetised. On a very clean rail, and every thing being favorable, 50 lb. were required without any magnetic effect, and 88 lb. when magnetised. The helix was made of No. 8 copper wire in one strand, 2,700 feet in length, and laid in 288 turns, insulated with cotton and marine glue, and covered with india rubber. He had not been able to discover any increased or diminished effect by the wheels being in motion or at rest, and they were tested up to 300 revolutions per minute. The battery used was a modification of Grove's, so contrived as not to stop, and consisted of sixteen cups each, having about 300 in. of zinc surface, and they were connected for the quantity of eight cups."

A similar plan was proposed many years ago, and it may now attain to useful practical results.

Wherever engines are worked nearly to their full adhesive power, it is requisite that the tyres, and if possible the rails, should be of such material as not to be at once abraded under the service so imposed. Steel tyres are already in use on several of our lines, with increased durability, and with no perceptible loss of adhesion, as compared with ordinary wrought iron tyres. The engines which have surmounted such heavy gradients in America, are mostly provided with cast iron tyres, the wearing surfaces being rendered intensely hard from having been cooled, in casting, within an iron mould. The same process of "chilling" is adopted in the manufacture of all the railway carriage wheels made in the United States, wrought iron tyres being seldom, if ever used, excepting for driving wheels. The moulds being turned perfectly circular, the form of the periphery of the wheel is not likely to be much altered by shrinkage in cooling.—The surface so produced can not, of course, be turned in a lathe, nor is it ground, but is used in the condition in which it leaves the foundry. Of course, also, it is worthless when worn out; but wheels so made are extremely cheap, seldom break, have an adhesion equal, as is believed, to that of wrought iron tyres; and, more than all, they can for a long time withstand the effects of sand, without which, the fact must be admitted, such rates of inclination could be worked only at a very great cost.—*London Engineer.*

MISSISSIPPI CENTRAL RAILROAD.—A private letter from the President of the Mississippi Central Railroad, dated at Holy Springs, on the 20th inst., says that there are but twenty-three miles of the road unfinished. The track is being laid at both ends, and the road will be completed about the last of December.

THE GREAT WESTERN RAILWAY.

We have failed to receive, by the last mail, a copy of the statement of the Directors of this Company, explaining the cause of the suspension of dividend for the past half year; but the *Leader* has been more fortunate, and devotes an article to the subject, which we transfer to our columns. It will be seen that the cause of the decline in the receipts of the line is ingeniously attributed to the failure of last year's crops, the fact being that the road has never done any business in the transport of grain until now. It is rather singular that all the principal roads on this continent have paid dividends, while the Great Western has done little more than pay current expenses. If the cause to which the decline in the revenue of the Great Western is attributed, had so seriously affected the road as is pretended, surely other enterprises would likewise have suffered to the same extent.—But, we will not stop just now to dispute the position assumed by the Directors; they have had their own troubles, and, if our information prove correct, we have reason to believe that an important change has been effected in the management of the Great Western. The next steamer will doubtless bring us intelligence of an important character. The following is the *Leader's* article referred to:

"At length we are in possession of the statement of the Directors of the Great Western Railroad, explaining the causes which led to the suspension of dividends. The chief cause assigned for the falling off of the traffic, during the last three years, is a diminution of agricultural produce. The competition of American lines is admitted to have had its share; though the directors are not disposed to regard it as a principal cause of the loss of traffic. Hopes are expressed that the great harvest of the present year will cause a turn in the tide of the affairs of the road; and it did not, at the time seem unreasonable to suppose that this would be the case. The time has now come when, if ever, this expectation would be realized. The produce of the late harvest has been moving eastward the last six weeks; but unfortunately there is no appearance of the hope held out by the directors being realized. And this is the worst feature of case; for it tends to the conclusion that the causes which have produced a decline in the Company's revenue are of a more permanent character. It is quite probable that, in the first instance, the original cause of the falling off of the revenue was a diminution of agricultural produce; but, in the interval, other causes have come into operation. That these latter causes are now in full activity is but too clearly proved by the present state of the earnings; the earnings for week ending October 14 being less than those of the corresponding week of 1858. The directors have indicated one of these causes—the opposition of American lines, especially that on the South shore of Lake Erie—but the event proves that they did not attach to it the significance it deserved. This opposition is the principal thing which the directors will have to attempt to overcome; and the task we fear, from present appearances, will not be an easy one.—Whether it be possible at means at the command of the company to accomplish this object is more than we can say; but before there will be any reasonable hope of success, the unfortunate prejudice to which the two last great accidents on this road gave rise, on the score of safety, will have to be overcome. The directors may urge that if the structures are not permanent they are nevertheless such as are used on the great majority of American Railroads. But,

in such a case, an argument, however sound its basis, will go for nothing in the face of adverse facts. A reference to the Desjardens' calamity will be apt to upset the best arguments drawn from analogy in the construction of the greater part of American railroads; more especially since the structure was restored after the original model. There is question that prejudices of this kind exist; and we see no way of getting rid of them but by changing the character of the structures, and in this respect elevating the Great Western to the rank of a first-class railroad. How this is to be done, with the vast weight of capital which hangs about the neck of the Company, is the question to be solved.

And this brings us to consider the cost of the road. The Company has expended £4,884,718 9s. 4d. With the exception of £65,976 4s. 5d., loaned to the Detroit and Milwaukee Railroad Company, the whole of this sum has been expended on 279 miles of railroad, making the cost £17,235 12s. 9d. or \$72,728 a mile. This is nearly double the average cost of American railroads of similar construction: a single track road, of second class, with temporary wooden bridges. The wonder is how so large a sum could ever have been expended on a road of such a character. To construct permanent bridges, and thus live down that prejudice which now operates injuriously against the road, a very considerable addition to the capital would be necessary. The claims of the original stockholders have been virtually set aside by the authority obtained, in 1858, to issue preferential securities. These stockholders have, however, now no right to complain; since they sanctioned the scheme by their acquiescence or silence, at the time it was proposed. Had our warning been heeded, at time it was introduced into the Legislature, the original stockholders would stand in a different position to-day.

The interest on the loan of £65,976 4s. 5d. to the Detroit and Milwaukee road is unpaid. What are the advantages to the Great Western of a connection purchased at a price? A short time ago, and for anything we know it may be the same yet, the two companies were carrying flour from Milwaukee to Toronto for 25 cents a barrel; a price which left not the remotest prospect of profit. Though the Great Western directors, in their report, call this the Detroit and Milwaukee railroad, it does not run to Milwaukee. Its western terminus is on the eastern side of Lake Michigan; and the lake has to be crossed before Milwaukee can be reached. The flour brought to this city for 25 cents a barrel has to be put on board the steamer at Milwaukee; at Grand Haven, on the eastern shore of Lake Michigan, it has to be put on board the freight cars; at Detroit it undergoes a third transposition, and at Windsor a fourth. It is then brought by the Great Western to Toronto. The transport from Milwaukee to Toronto, including the four transpositions was, and for anything we know to the contrary, still is, effected for a nominal charge of 25 cents. And yet, strange to say, it has recently been put forth as the peculiar merit of the Great Western management that they have always obtained a paying rate for the business they have done.

Taking stock in railroads is something like playing at chess; with this difference, that there is not the same opportunity of calculating the chances. A projected line may be shown to have advantages, in point of distance and grade, over some or even all existing lines. It may in addition be shown that there is traffic enough for an additional line. When the grounds of a venture are so good, why hesitate to subscribe?

What more is requisite? The general conclusion has been in such cases, that nothing more is requisite. But something more is necessary. It is necessary to ascertain whether a line, presenting still greater advantages, can not hereafter come in as a rival to upset all calculations of traffic and profit. In many cases, it is absolutely impossible to ascertain this; for it frequently happens, especially in new countries, that the surveys requisite to base a conclusion of so general a character upon do not exist. Railway stockholders, therefore, very frequently speculate in the dark; and this even when they seem to be basing their action upon the clearest demonstrations. Ten to one the shareholders of the Great Western, when they subscribed for the stock, entertained the idea of a rival line, on the shore of Lake Erie; and yet it was in that future, which, in order to speculate safely in railway stock, must be calculated with all possibilities and contingencies. This rule is not followed now; and those who fancy they are making profitable investments, sometimes wake up to find that they have been ruined.—*Hamilton Spectator*.

SOUTHERN PACIFIC RAILROAD.

The following letter from the President of the Southern Pacific Railroad, Dr. Jephth Fowlkes, contains so full and satisfactory an account of the present condition of that company that, although a private communication, we take the liberty of giving it entire to the public. It meets every point in regard to which stockholders or others, favorable to the enterprise would seek information. It is direct, plain, positive in its assurances; and can not fail to increase the hope and awake new energy, among all the friends of a Pacific railroad over the Southern line:

MARSHALL, TEXAS, Sept. 19, 1859.

We have possession of the road and all the property of the company; also, own the rights, franchises, &c., of "the new company." All its members, I believe, without a single exception, are satisfied, and actively co-operating with me, to free the enterprise of the embarrassments heretofore staying its operations, and arresting the progress of the road. To-day the "State suit" was submitted to a jury, who returned a unanimous verdict for the defendants, *i. e.* the Southern Pacific Railroad Company, placing thereby forever at rest the claims and allegations of the State *vs.* the company, as grounds and causes for forfeiture of chartered powers, privileges and franchises.

I have provided the means to extinguish nearly the entire debts outstanding in Texas, and have resources to pay off all that can be reasonably demanded here. From the feelings manifested by the citizens of Texas, I can not now doubt my ability speedily to free the company of every embarrassment, and to meet fully the terms required by Hon. J. Edgar Thomson, upon which he will accept the presidency of the company.

A most liberal pecuniary aid will be given to the road in Texas, with any and all proper legislation.—The names of Thomson, Tate, Jones and others have created here full confidence in the success of the work in Texas.

Very truly,

J. FOWLKES, President.

No one can longer hesitate in giving confidence to this great enterprise. Its stock reduced so that the total amount issued, added to the debts of the company, make a sum less than the lowest estimates of the value of its real property—the State of Texas under the charter a liberal contributor in money and lands

to the enterprise—the people of the State united in their determination to accomplish the work, and the enlistment in its management of the strongest men in the country, whether we regard their pecuniary strength or their railroad experiences—form, independent of the nature of the road itself, a combination of influences to carry the project through a successful termination that can not fail.

To the energy and practical tact of Dr. Fowlkes, the stockholders and the country owe a debt they can never repay. An abandoned work has been by him resuscitated. Upon the ruins of a noble undertaking he has laid the sure foundation and provided for the superstructure of the original plan.

The question may now pertinently be put to the capitalists of the South: Will you not come to the help of the road? Missouri has issued her bonds for seven millions of dollars to the Pacific road on a line west from St. Louis. The Southern Pacific is now in a more favorable condition than the Missouri road. It appeals particularly to all Southern men, as it opens a vast region of country to emigration and settlement, which will demand and must have our species of labor.

This cheerful report of the condition of affairs, which is so briefly but so satisfactorily given by President Fowlkes will, we trust, set forever at rest all suspicions and doubts, and unite the people more deeply interested in its success in active measures to hasten its completion.—*N. O. Picayune*.

MANUFACTURES AND IMPORTS.

The progress of international commerce between the United States and Europe seems to rest at present on a very insecure footing, since the interchange consists in giving raw produce and gold for manufactured goods, while the supplies of the latter of home made descriptions are coming rapidly to equal the national wants, and, on the other hand, England and Europe are apparently restricting their purchases of American produce to gold and cotton. The largest quantity of foreign goods ever imported into the United States was in 1856, *viz.* \$298,261,364 net, or \$9 per head, while in 1836, just twenty years previous, the import was \$168,233,675, or \$11 per head. In that twenty years the wealth of the country underwent a prodigious increase. In this country the spirit of society and that of established political institutions are both adverse to monopoly, and where it is the regular operation of law to dissolve those accumulations of wealth which are the fruits of superior industry and talents, an increase of wealth necessarily follows an increase of population; property becomes more abundant, but its effects are less apparent, because it is more equally diffused. Wherever property exists in large masses, a much greater portion is invested in objects of ostentation and luxury, than in countries where it exists in a more uniform distribution. The millions which in one country lie unproductive in the form of regal palaces, in this take the shape of productive employments, which gives to thousands of families the means of purchasing goods. The vast wealth which has accumulated in the United States in the twenty years alluded to, has given the means of greater expenditure, of which we have evidence on every side, but the purchases of foreign goods have been less, because the supply has been furnished at home, as both a means and a consequence of that wealth. The value per head consumed, if it remained the same, would show a large growth in home manufactures,

since the means of the masses to consume have become so much greater than at that time. With the increase in capital necessary to the promotion of production those manufactures must increase in a ratio still more rapid. In the last ten years the construction of railroads has not only absorbed a great deal of capital and labor that otherwise would have been applied to the production of goods, but has promoted the importation of iron for the roads, as well as goods for the builders. The importation of iron in eight years ending with 1847, averaged eight million dollars per annum, and in the eight years ending with 1856, twenty-one millions per annum. In that eight years there were expended \$800,000,000 in the railroad manufacture—an operation which not only employed a vast number of men, but capital also, and that to an exhausting degree. The works are indeed not lost, as the banks were twenty years earlier, but remains as instruments of trade. The capital that was expended in building them is however, wanted in other enterprises, and as it accumulates in the next ten years it will probably be so applied to the development of manufactures as still more seriously to diminish the kinds and quantities of goods that Europe will offer with which to pay for cotton and other produce. The question is not of protection now. There is no branch of manufactures which, with the smallest pretence to economy, can not prosper, in face of any similar goods that Europe can send. The result of the present season's importation, is proof that the time for great profits has passed, and the rule is to be loss, with gain for the exception. The day for corporate manufacturing is however passed, and that of individual enterprise and industry to succeed. This is very marked in the case of hardware goods. The imports of all iron manufactures in 1836 and in 1856 were as follows:

	Rail and bar iron.	Iron and steel goods.	Population.	Goods per head.
1836...	\$4,023,242	7,761,102	15,188,000	50 cents.
1856...	11,532,065	7,601,204	27,400,000	27 cents

Thus in general iron goods the figure for the importation has with difficulty maintained itself, while the population and wealth of the country has increased to a great extent. Twenty-seven millions of people with quadruple the wealth bought twenty-seven cents worth per head of foreign iron goods, instead of fifty cents worth as twenty years previous. There are no means of arriving at the quantity of hardware manufactured in the country in 1836, but the Treasury Department furnish tables of the value of iron and iron goods manufactured at three periods as follows:

	Manufactures of iron goods.	Total of all iron.
1840.....	\$12,820,145	29,909,162
1850.....	22,628,771	60,485,633
1855.....	28,377,607	78,406,538

Thus in fifteen years the manufacture of iron goods in the United States increased sixteen millions, while the import remained stationary. This was brought about by the enterprise of individuals. That description of goods is not to any extent produced by the corporate or monopoly system by which capital is wastefully applied in the hands of irresponsible persons to the production of cottons and woollens. It has been the case that while the manufacture of iron goods has so progressed, that the import of railroad iron has greatly increased. To produce railroad iron requires a large capital, and these capitals exist only in England. The railroads have been enabled to exchange their bonds for that iron, and so procure it on terms not admissible here. The result has, it is true, produced

and expense at the Custom-houses are avoided, and as the goods are sent forward in bond, the consignee gets the same advantage as though shipped by any of the Eastern ports, without being subject to the disadvantages of the other routes. Our merchants can not fail to realize the importance of this almost direct communication with the leading shipping ports of the Old World, and instead of having their goods brought by way of New York, will direct their shipments via the Grand Trunk and its connections between Detroit and this city.

RAILROAD DECISIONS.

James Brown and others, Trustees, &c., vs. The New York and Erie Railroad Company and others.—INGHAM, J.—The plaintiffs, Brown and Davis, as trustees for the holders of the third, fourth and fifth mortgage bonds, and Drew as a holder of the fourth mortgage bonds, commenced this action, and obtained the appointment of a Receiver for the benefit of all represented by them.

A motion is now made by Davis, one of the trustees, for an order directing the Receiver to pay the interest coming due upon the fourth mortgage bonds out of the receipts of the road, to the exclusion of other indebtedness, and against the consent of some of the trustees on the prior mortgages.

The ground upon which such an application is made is, that the bonds secured by the fourth mortgage are so drawn that the principal becomes due and payable, if the interest is not paid.

The application is opposed by a trustee under the second mortgage, Mr. Joseph Walker, and by the receiver.

Independent of the fact, as stated by the receiver, that the amounts to be paid as provided for by the order appointing a receiver exceed \$1,000,000, and which would of itself prevent this payment, I see no propriety in granting this motion.

The receiver was appointed to protect the rights of the prior bond-holders as well as those interested under the fourth mortgage. In point of priority, those having the first claims are entitled to payment out of these moneys before the holders of the fourth mortgage bonds; and I know of no rule of law or equity which allows the funds of an insolvent corporation to be diverted from a proper application of them, because it may be deemed for ulterior purposes to make such a use of them.

It is said that these bonds will at once become payable in full unless the interest is paid, but such a result would not authorize a misapplication of the funds received by the receiver. No serious injury could happen therefrom, because the bonds held under the second mortgage have already become due, amounting to \$1,000,000, and a foreclosure by them would be more productive of evil than proceedings on behalf of those subsequent in their claims. The division of funds so received would naturally lead to such a foreclosure, and, instead of operating beneficially, it seems to me that the want of confidence in the proper appropriation of the moneys received by the receiver, which such a course would naturally induce, would be productive of serious injury, instead of the beneficial results contemplated by those making the motion.

The motion must be denied.

DAMAGES FOR BEING PUT OFF A RAILROAD TRACK.—A suit of a somewhat singular character was tried at the Mansfield (Ohio) County Court recently. Sometime ago a lady, the wife of the postmaster at Salem, got on the cars of the Cleveland, Columbus and Cincinnati Railroad at Crestline, intending to go Salem. She had along with her a couple of small children. When the conductor came around for tickets she offered him a ragged and soiled one dollar bill, which he refused to take, saying it was worthless. The lady said it was all the money she had, and that it was good. She was then told by the conductor that she must get off when she got to Shelby, which she did on the arrival of the train. At that station she was advised by some gentleman to get on the train again, it being only five miles further to Salem. This she did, and when the conductor came round, and found her without other money than what was before offered, he stopped the train and put the lady off. The day was cold and a drizzling rain had made it quite muddy, and having got over a half a mile to walk for shelter, the lady and the youngest child took a severe cold, which, after a sickness of over two months, resulted in the death of the latter. Suit was brought for damages, and after a protracted trial, the jury returned a verdict for the plaintiff for \$650.

The Court of Appeals of Virginia have unanimously affirmed the judgment of the Court of Staunton, in the case of Sanger *et al.* Central Railroad Company. At the November term, 1856, of the Circuit Court of Augusta, Jacob Sanger received a verdict of \$6,000 damages for injuries received by the plaintiff whilst a passenger on the cars of the defendant. The cars were thrown off the track by a large stone left lying near the rails by the carelessness of some hand in the employment of the contractors who were "ballasting" the road, and the plaintiff had his leg broken. At the trial the company contended that they were not responsible for the acts of the hands in the employment of their contractors. The Judge (Thompson) held that they were, and on this the case went up. This is the first case in Virginia settling the extent of liability of railroad companies as passenger carriers, and holds them up to the most rigorous responsibility. The judgment amounts to over \$7,000 at this time, exclusive of the counsel fees paid by the company.

COMPARATIVE EARNINGS OF THE PRINCIPAL RAILWAYS.—The following is a comparative memorandum of the September traffic on some of the prominent Railways, furnished to the *New York Times* by a correspondent:

Railroads.	Stock and Bonds.	Sept-ber traffic.	Percentage on stock.
Galena and Chicago....	\$9,809,415	\$212,260	\$1 16
New York Central....	38,585,033	730,483	1 89
Michigan Central....	14,212,329	210,877	1 48
Chicago and Rock Island.....	8,785,715	114,788	1 30
Hudson River.....	12,612,926	156,973	1 24
Erie.....	37,438,016	456,206	1 21
Cleveland and Toledo....	7,185,347	72,995	1 01
Michigan Southern.....	18,318,400	181,113	98
Illinois Central ..	27,651,988	242,034	87

THE NATIONAL DEBT OF ENGLAND.—The view people take of the national debt depends entirely upon what results they connect with it. It is very difficult to make people feel at all pleased with paying £28,000,000 a year; it is not to be expected that they should look upon it as a particular subject of gratitude; and if the resign themselves without much struggle, now that such a debt has been contracted, to the conscientious obligation of paying the interest, is as much perhaps as we can claim of them. There are different kinds of monuments—there are monuments of marble and brass which record all varieties of virtue—statues and busts, with angels and victories trumpeting over them; there are monuments in the shape of books and great names; but, after all, for a real, concentrated, speaking, effective monument of this nation there is nothing like the national debt. It tells a story of the character and energies of the English people that nobody can well gainsay, because it tells it in the language of plain arithmetic. The imagination is indeed powerfully appealed to by this list of tremendous figures year after year—year after year, going on; nothing stops them; they symbolize indomitable will, the character that never faints in a struggle and never shrinks from fresh effort. We say nothing of glory—people may talk about that who have political minds—it is for the profit, the advantage of the nation that it should have such a monument. It is impossible to tell how much it may save us. It may possibly have been worth while in the long run to have made this manifestation, if it was only to make our neighbors certain that whenever as a nation we see the justice of a cause we will spend any amount of money to vindicate it. That is now an important and ascertained element in the estimate of warlike probabilities in any war that may threaten, and such a piece of knowledge must often have a peaceful tendency.—*London Times.*

GREAT WESTERN RAILWAY.—The following is the Traffic for the week ending 15th of Oct., 1859:

Passengers.....	\$27,526 43
Freight and Live Stock.....	18,998 55
Mails and Sundries.....	1,803 00

Total.....	\$48,327 98
Corresponding week of last year.....	49,070 29

Audit Office, Hamilton.	
GRAND TRUNK RAILWAY OF CANADA.—Audit Office, Montreal Oct 7, 1859.—Statement of Traffic Receipts for week ending Saturday, Oct. 1st, 1859:	
Local Passengers 15,686.....	\$29,361 11
Foreign Passengers, 3,715.....	8,591 01
Emigrant do. 213.....	407 37
Mails, Express, etc.....	2,349 46
Local Freight and Live Stock, 8,598 tons.....	25,764 81
Timber and Lumber 987,907 feet, 1,211 tons.....	2,628 05
Firewood, cords, 1,080, tons 1,626.....	1,198 98
Foreign Freight, etc., tons 1,781.....	4,623 05

Total.....(880 miles).....	\$70,903 84
Week ending Oct. 2, 1858, (880 miles)....	54,471 47

Increase, (0 miles).....	\$13,412 56
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Total Traffic from July 1st, 1859, to date.....	\$606,720 55
For same period last year.....	550,420 37

JOHN HARDMAN, Auditor.

MONETARY AND COMMERCIAL.

There has been some improvement in money matters since our last; there is however considerable closeness yet, which will continue for some two or three months to come, at least until after the purchasing season of the grocery and pork trade has past. The present movement of produce towards the seaboard is contributing to make things more comfortable in the West. Our quotations are the same as heretofore; by the regular houses to their depositors at 10@12. There is considerable attention paid to the selecting of paper, and all that is not strictly prime, or is unknown, is forced to seek an outside market. Street rates vary from 15 to 24.

Eastern Exchange is firm, with a moderate demand, at 4 premium for banker's checks, 40 premium buying for Baltimore and Boston, and 50 for New York and Philadelphia; New Orleans par, at 4 premium, the latter rates for banker's checks.

The *N. Y. Economist* says there has been very little change in the aspect of the Stock Market. There is at present no very vigorous movement on the part either of bears or bulls. The former are indisposed for the moment to press the market in face of the abundance of money, and the latter have quite as much as they can do to hold their ground, in face of the increasing supplies and deteriorating values of the leading stocks upon the market. The best of the Western roads show only a slight increase upon the down freight business of last year, with a decline in the passenger and general traffic. The produce brought down if larger in quantity is less in value, and the pecuniary difficulties of that region increase—so much so, that their ability to hold either State or Railroad Stocks is lessened, and the prospect for the recovery of the road values less hopeful. Galena maintains itself at about 74. New York Central at 80; Rock Island 64; Toledo 19; Michigan Southern 16; Michigan Central 42; Reading 37; Harlem 10; Pacific Steamship 71; last year in October it was worked up to 107—the traffic of the road it is said improves. In State Stocks the market is firm. Missouri Sixes, 84; Tennessee, 89; Virginia 94; U. States 5's, 103; Indiana 5's, 86; Michigan 6's, 105.

The *N. Y. Courier* says the Bank Statement for the week presents favorable features, the changes compared with the preceding week being as follows:

In Loans, an increase of.....	\$28,000
In Specie, an increase of.....	1,355,000
In Deposits, an increase.....	1,476,000
In Circulation, a decrease of.....	52,000

The *London Times* of October 13, remarks there is little demand for money at the Bank. In the open Discount Market the supply on and after the 13th inst., promise to be excessive, and in the Stock Exchange loans on Government Securities can be freely obtained at any extent at 1 per cent.

RECEIVER'S REPORT OF THE C. W. AND ZANESVILLE RAILROAD CO., FOR SEPTEMBER.—Wm. Key Bond, Esq., Receiver of the Cincinnati, Wilmington and Zanesville Railroad, filed his Report for September, in the U. S. Court yesterday, as follows, viz:

Gross Earnings of Trains.....	\$22,024 28
Ordinary Expenses.....	11,933 90
Extraordinary Expenses.....	569 43
Capital Expenses.....	733 80
	13,177 18

Cash receipts from all sources.....	\$21,319 50
Disbursements.....	14,955 78
All debts and liabilities contracted by Receiver and remaining unsatisfied on the 30th of September.....	\$29,916 90

Debts and liabilities due the road which have accrued during the Receivership of W. K. Bond, and remaining uncollected September 30th.....	\$27,958 89
Through Passenger Business.....	\$ 317 50
Local do. do.....	6,317 50
State Fair do. do.....	6,893 90
Mail do. do.....	938 10
Express do. do.....	447 95

Freight Business, Through.....	948 55
Do. do. Local.....	6,409 53
	7,358 10

Total.....	\$22,024 28
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Subject to overcharges, drawbacks and deductions.

RAILROAD BRIDGE DESTROYED BY FIRE.—LEXINGTON, Ky., October 25.—The bridge on the Lexington and Louisville Railroad, over Elkhorn, was destroyed by fire this evening. Loss about \$3,000 or \$4,000.

The Pennsylvania Railroad Company have declared a semi-annual dividend of three per cent., clear of State tax, payable on and after 15th of November next.

GREAT SALE OF RAILROAD LANDS. 40,000 ACRES Of the Finest Arkansas Lands, at PUBLIC SALE.

Pursuant to an order of the Board of Directors of the Little Rock and Fort Smith Branch of the Cairo and Fulton Railroad Company, made on the 8th day of June, 1859, 40,000 Acres of Land will be offered for sale at the Office of said Company, in the city of Van Buren, Crawford County, Arkansas, on

MONDAY, THE 14TH DAY OF NOV., 1859,

and from day to day until sold, being about one half of the lands attached to the First Division of said Road. These lands are advantageously situated upon, and near the Line of the Little Rock and Fort Smith Branch Railroad, which is now being placed in course of construction. They comprise some of the most valuable bottom and uplands in Western Arkansas, and are situated in the Counties of Crawford, Sebastian, and Franklin, and are within twenty miles of the City of Van Buren, and within twenty-five miles of the City of Fort Smith. This Railroad traverses a part of the finest and richest portion of the State, and its completion within five years, will afford railway communication with every portion of the Union. Immigration to this State has been steadily increasing until the better part of the Government Lands are absorbed. The lands attached to this road were selected and confirmed years ago, and are now brought into market for the first time, and present inducements to planters and Farmers desiring to emigrate from the older States, and rare opportunities to Capitalists for safe and remunerative investments. The climate is unequalled by any portion of the Great West for salubrity and health; the soil is remarkably productive, and the country well watered and timbered. The Company are in condition to make good title to the lands now offered for sale.

Terms—One third cash; one third in six months; and one third in twelve months; notes to bear interest from date, at the rate of ten per cent. per annum, until paid. Full lists of these lands, and all desirable information concerning them, will be furnished on application, personally, or by Mail, to J. B. OGDEN, Secretary, at the Company's Office, in Van Buren.

JESSE TURNER, President.

Office of L. R. & F. S. Branch of C. & F. R. Co.
VAN BUREN, ARK., August 31, 1859. Oct. 20.

To Contractors having Capital.

THE MARYLAND AND DELAWARE RAILROAD CO. will receive sealed proposals until the 1st of December for the work and materials of fifty-three miles of Road; extending from its junction with the Delaware Railroad, at Sangena, Delaware, to Oxford, Maryland; forming the shortest connection between Philadelphia and Chesapeake Bay, at a point always unobstructed by ice, near the mouth of Great Choptank River.

The resources of the Company (which is free of debt.) consist of individual stock, State appropriations, and work already done; but they propose to make payment for the work now offered, principally in First Mortgage Bonds; which they are prepared to show will be a safe, interest paying and profitable investment.

Twenty miles of the Railroad are already graded, the entire line located and secured, and the nature of the work very favorable for Contractors.

A circular containing a map and profiles, with descriptions of the character, position, and resources of the road, will be issued about the 25th inst., and sent by mail on application to L. C. W. Powell, Secretary Maryland and Delaware Railroad Co., Easton, Md.; to whom proposals will also be addressed.

Oct. 20. TENCH TILZHMEN, President.

WILLIAMS' CINCINNATI DIRECTORY 1860.

OUR Canvassers are now engaged collecting information for the CINCINNATI DIRECTORY for 1860, (Tenth Annual Issue.) The Directory for 1860 will be greatly improved over any former issue. It will contain, in addition to Cincinnati, Directories of Covington and Newport, a complete list of Post Offices in the United States, and many other improvements. It will be issued on the 1st of January. Subscription Price will remain as heretofore, \$2.

C. S. WILLIAMS,
194 Walnut Street.

NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith
Branch of the Cairo and Fulton Rail-
road Co., Van Buren, Ark., Sep. 10, 1859.

SEALED PROPOSALS for the graduation of the First Division of twenty miles eastward from Van Buren, will be received at this office until **Thursday noon, December 1st, 1859.** The work is divided into twenty sections of about one mile each, and proposals for either a part, or the whole of this Division may be made; but no bids for less than one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise. Estimates of work done will be made on the first day of every alternate month, and payments made on the first day of the month following; and fifteen per cent. of all estimates will be retained until the completion of the contract. Contractors desiring other terms of payment may bid accordingly, as the above terms are not positively settled.

The Company having a large amount of the finest Lands in Western Arkansas, will give preference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications may be seen, and all desired information obtained, upon application at the Engineer's Office, in Van Buren.

JESSE TURNER, President.

NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith
Branch of the Cairo and Fulton R. R.
Co., Van Buren, Ark., Sep. 10, 1859.

SEALED PROPOSALS for the Masonry of the First Division of twenty miles eastward from Van Buren, will be received at this office until **Thursday noon, December 31st, 1859.** No bids for less than the amount of Masonry upon any one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise.

Contractors will state terms of payments, and proportions of money, stock and lands, and amount to be retained by the Company to secure the completion of the contract. The Company reserves the right to reject any and all bids at its option.

Plans and specifications may be seen, and all desired information obtained on application at the Engineer's Office, in Van Buren.

JESSE TURNER, President.

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANA OR SANDOVAL

FOR

Decatur, Springfield,
Bloomington, Peoria,
Burlington, Quincy,
La Salle, Rock Island,
Dixon, Galena,
Prairie du Chien, St. Paul, and
St. Anthony.
And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections. twice daily, at PANA for all the above points. Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R., at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via

PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all

TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,
Gen'l Southern Agent, Cincinnati.

W. P. JOHNSON,
Gen'l Passenger Agent, Chicago.

MOSELEY'S WROUGHT IRON ARCH BRIDGES —AND— Corrugated Iron Roofs ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders a No. 66 West Third Street, Cincinnati, Ohio.

Spt. 2.

MOSELEY & CO.

June 21, 1859.

Cincinnati, Hamilton and Dayton



RAILROAD.

FOUR TRAINS

LEAVE THE SIXTH STREET DEPOT DAILY

TRAINS RUN THROUGH TO RICHMOND, LIMA, SANDUSKY, AND DELAWARE WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND NORTH-WESTERN CITIES.

(Columbus time, which is seven minutes faster than Cincinnati.)

6 A. M. EXPRESS TRAIN—For Cleveland and Pittsburgh, via Delaware, makes close connection at Crestline for Pittsburgh, Baltimore, Philadelphia and New York; and at Cleveland for Dunkirk, Buffalo, Boston and New York. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 7:20 P. M., Quincy and Galena at 7 A. M. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Munice. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

8 A. M. MAIL TRAIN—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STEAMER FOR DETROIT; at Forest with Pittsburgh, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at DELAWARE with the C. C. and C. Road, for Cleveland and points East. Also connects with Junction Railroad at Hamilton for Oxford.

4:30 P. M. TRAIN—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburgh, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Also, connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago. Also connects with Junction Railroad at Hamilton for Oxford.

6 P. M. TRAIN—For Dayton, Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 8 A. M.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; at the new Ticket Office on West side of Vine street, between the Post Office and the Burnet House; or at the Sixth Street Depot.

D. McLAREN, Superintendent.

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circular which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the retort is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet,.....	\$300 00
do do do 350 " " " " " " " " " "	335 00
do do do 400 " " " " " " " " " "	375 00
do do do 500 " " " " " " " " " "	450 00
do do do 600 " " " " " " " " " "	525 00
do do do 700 " " " " " " " " " "	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	10 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, as now in operation in several States, apply to

R. T. COVERDALE,

167 Walnut Street, Cincinnati, Ohio, who has the exclusive right to manufacture and sell in the State of Ohio.
Feb. 24th, 1859.

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Booksellers, Publishers, Stationers & Blank Book Manufacturers,
43 Main St. Cincinnati, O.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Booksellers, Country merchants, Teachers, and others to our extensive stock of Theological, Standard, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable leading publishers, as well as the principal manufacturers of Paper and Stationery, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

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Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, Envelope, Manilla and Tea wrap-boards, Gold and steel Pens, Penholders, Copying Presses, and Inkstands; Erasers, Sealers, Slates, Mucilage, Book rests, Bill head boxes, Envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files; Date Calendars, together with all other articles used in the counting-house.

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Stereotype of any description that may be desired as the same can be executed or else. Our facilities for these branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Dray receipts, Cards, Circulars, or other printing, will find that we do such jobs despatch. Orders re-

Publishers,

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, *Clarke's Compendium*, *Lin's Ancient History*, *Plutarch's Lives*, *Josephus' Spectator*, *Chain of Sacred Wonders*, *Familiar Science*, *Webb's Monitor*, *Sollen's German*, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

43 MAIN STREET, CIN.

W. HARVEY'S SAFETY JOINT For Coupling the Ends of "T" Rails. PATENTED, NOV. 2, 1858.

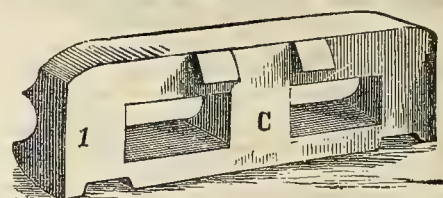


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

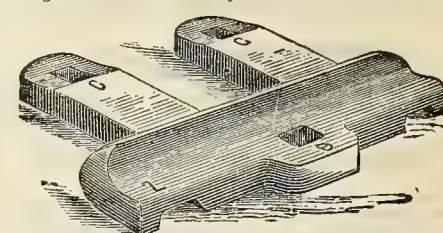
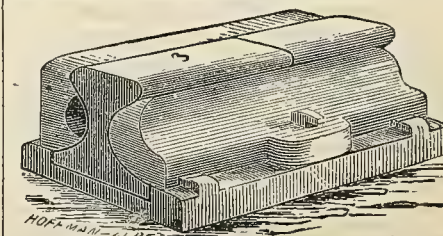


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that on one part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly safe road, thereby doing away with the breaking of rails, wheels, and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear on the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
41 Jefferson-street, Albany, N. Y.
ON AGENT, Cincinnati O.

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

SOLE IMPORTERS
PROSSER'S PATENT SURFACE CON-
DENSERS for high pressure steam, with sea or
other bad boiler water, gauges, 3-cutter drills, counter-
sinks, tube end cutting bars, expanders, tube scalers,
steel wire and whalebone brushes, pull lever wrenches,
tubes—plain or enameled, screwed together for Artesian
Wells, Hollow Slabs for various purposes, Steel for
Rollers. **THOS. PROSSER & SON,**
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MANUFACTURERS OF

CHILLED WHEELS

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TIRES,
For R. R. Cars & Locomotive Engines,

ARE PREPARED TO
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FOR THEIR
CELEBRATED WHEELS,
EITHER SINGLE OR DOUBLE PLATE,
WITH OR WITHOUT AXLES.

WHEELS FITTED
To Hammered or Rolled Axles,
In the best manner, at the shortest notice, and on the
Most Reasonable Terms.

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A Book for Every Business Man!
JUST PUBLISHED

—THE—

POST-OFFICE GUIDE!
For Post-Masters and Business Men.

CONTAINING

A Complete List of Post-Offices in the United States
and Territories, arranged by States and Counties; A
Complete List of all Distributing Post-Offices; Rates
of Foreign and Domestic Letter Postage; Rates of
Printed Matter, Transient and Regular; Abstract
of the Laws and Regulations of the Post-Office De-
partment, &c., &c.

COMPILED BY E. PENROSE JONES,
Late Assistant Post-Master at Cincinnati.
Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.

U. S. BLANK AGENCY, CINCINNATI POST-OFFICE, }
January, 1859. }

This work has been carefully compiled and corrected by
E. PENROSE JONES, Esq., late Assistant Post-Master of the
Cincinnati P. O., from the Records in this Department, and
other sources, and contains the most complete list of Post-
Offices especially of the Western, North-Western, and
South-Western States, yet published.

MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an actavo pamphlet of about 100 pages.
The entire matter is kept standing in type, and as the com-
piler is promptly advised of all New Offices, Changes and
Regulations of the Department, the information is corrected
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Observe, That this list is arranged by States and Coun-
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SEWING MACHINES.

W. M. SUMNER & CO., cor. Fourth and Wal-
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BRANCH OFFICES:

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important improvements, at a reduction on former prices;
and to meet the demand for a good, LOW-PRICED FAMILY
MACHINE, have introduced a new style, working upon the
same principle, and making the same stitch, though not so
highly finished, at-

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALIKE ON
BOTH SIDES, impossible to ravel, and leaving no chain or
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tability to the thickest or thinnest fabrics, have rendered this
the most successful and popular Family Sewing Machine
now made.

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sew ordinary seams, hem, fell, quilt, gather, bind, and
tuck, all on the same machine, and warrant it for three
years.

Send or call for a circular, containing all particu-
lars, prices, testimonials, etc.
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WM. SUMNER & CO.

1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th
Corby, Gossin & Co.'s make, for sale very
low by
TRABER & AUBERY,
7 Public Landing

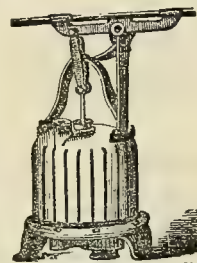
GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND
Compound Steam Pumping Engine,



WOULD respectfully invite
the attention of RAILROAD
Companies, Manufacturer
Distillers, Miners, and the pub-
lic generally to these Pumps:
as the best Pump now in use
and acknowledged by all who
have used them to be perfect-
are simple in their construc-
tion, compact, durable and not
likely to get out of order; well
adapted for Steamboats, Rail-
road Water Stations, Distill-
eries, Breweries, Furnaces,
Mines, Rolling Mills, Paper
Mills, Factories, Wells, &c.

Stationary Fire Engines, Garden Engines and for
all purposes where a Pump can be used. Also, for
forcing a large body of water to a great height or distance
rapidly.

Also, McGowan's Patent Ball Valve Pump, designed
for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings,
Lead, Copper and Gas Pipe furnished at the lowest mar-
ket prices.

Full and perfect satisfaction guaranteed in all cases,
when properly put up according to directions.
Orders thankfully received and promptly filled at the
shortest notice.
SILVER MEDAL. (The highest prize) awarded
the compound steam Pumping Engine at the late Pa-
cific Ocean Mechanics' Institute. June 18, 1855 - 1

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co.,
Pennsylvania, are prepared to execute orders for Street and
other Rails on terms favorable to parties wanting to pur-
chase
Ag. 4, m.6.

FREEDOM IRON COMPANY,

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods,

Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

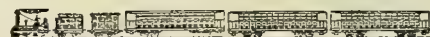
JOHN A. WRIGHT, Sup't.

This Iron is all made from best Juniata cold-blast char-
coal Pig Iron, refined with Charcoal in the old-fashioned
Forge Fire, hammered into a Bloom from which Iron is
hammered. The whole operation from ore to finished Iron
is conducted at our own Works. June 9.

New Time Table

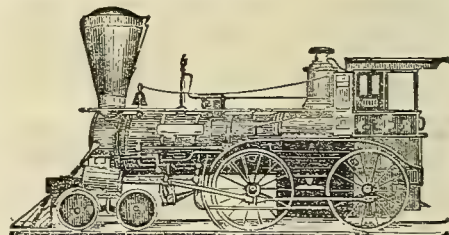
OF THE

NEW YORK CENTRAL R. R.



	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp.	7:00 A. M.	7:00 P. M.	7:00 P. M.
Mail	9:00 A. M.	12:50 A. M.	
New York Exp.	11:15 A. M.	9:00 P. M.	9:00 P. M.
Night Exp.	5:00 P. M.	4:00 A. M.	4:00 A. M.
Utica Accom'n.	6:00 P. M.	Ar. U. 10:00 P. M.	
N. Y. Mail	11:15 P. M.	10:00 A. M.	10:00 A. M.
	Leave Buffalo.	Leave Bridge.	Arr. Alb'y
New York Exp.	5:15 A. M.	5:15 A. M.	3:30 P. M.
Steamboat Exp.	8:00 A. M.	8:00 A. M.	8:00 P. M.
Mail			2:30 P. M.
Cleveland Exp.	6:00 P. M.	6:00 P. M.	4:40 A. M.
Cincinnati Exp.	11:00 P. M.	11:00 P. M.	8:30 A. M.
Utica Accom'n.			10:00 A. M.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive
equal in efficiency and durability to the best American
manufacture. Also, Shaping and Slotting Machines
suitable for railroad shops. Also, all kinds of heavy
forging and casting done at short notice. Also, bolts for
bridges cut with dispatch.
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MOORE & RICHARDSON.

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DIRECTED by a Board of Visitors appointed by the
State, is under the superintendence of **Col. E. W.
MORGAN**, a distinguished graduate of West Point,
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Geology; also in English Literature, Historical Read-
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regulated exercise.

Schools of Architecture, Engineering, Commerce,
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time means, and object of Professional preparation, both
before and after graduating.

The twelfth annual term is now open. Charges, \$102
per half-yearly session, payable in advance.

Address the Superintendent, at "Military Institute,
Franklin Springs, Ky.," or the undersigned.

P. DUDLEY,
President of the Board,

Jan 5th.

The Railroad Record.

E. D. MANSFIELD,
T. WRIGHTSON, } Editors.

CINCINNATI:
Thursday Morning, Nov. 3. 1859.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.
To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

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A square is the space occupied by ten lines of Nonpareil.

One square, single insertion,.....	\$1 00
" " per month,.....	3 00
" " six months,.....	12 00
" " per annum,.....	20 00
column, single insertion,.....	5 00
" " per month,.....	10 00
" " six months,.....	40 00
" " per annum,.....	60 00
1/2 page, single insertion,.....	15 00
" " per month,.....	25 00
" " six months,.....	110 00
" " per annum,.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

THE European Agents for the *Railroad Record* are MESSRS. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

THE earnings of the Dayton and Michigan Railroad (140 miles) for September—the first month after its completion—were \$25,200.

AN INVESTIGATION INVITED BY THE DIRECTORS OF THE COVINGTON AND LEXINGTON RAILROAD.—In consequence of the many rumors afloat in regard to the bad management of the Directors of the Covington and Lexington Railroad, the sale of which was confirmed by the Fayette Circuit Court, on Saturday last, the Board held a meeting on Monday, and adopted the following:

WHEREAS, Several publications in the news papers of Kentucky and Ohio have charged that the President and Directors of the Covington and Lexington Railroad Company have been unfaithful to the trust confided in them by the stockholders, and that by their acts this valuable property has been irretrievably lost to them, at a called meeting of the Directory, at their office, in Covington, held this day, it was unanimously

Resolved, That the stockholders be requested to appoint a committee to confer with one to be appointed by this Board to examine the books, vouchers, receipts and disbursements of the company, and to see if it were possible to save the road by skill or management on the part of the Directory, and to report to a called meeting of the stockholders.

OHIO AND MISSISSIPPI RAILROAD.

This great work is one which, perhaps, requires more than any other in the country—time for its development. Time is an element of its success. With time, all that was ever predicted of its value and prosperity will become true. The foresight which planned this great arterial chain in the mighty Railroad System of this country is already vindicated; but, the road has not yet become profitable, for obvious reasons. The great cost of the road, full fifty per cent in advance of the estimates, was occasioned by the immense sacrifices which were imperatively necessary, in order to finish the road, in times of financial distress. The Directors have been censured for want of prudence, and the leading men in the enterprise made to bear no little obloquy. Yet, there was no alternative but to finish the road, by sacrifices, or to leave it unfinished, till the present, or still more remote period. The former course was adopted, and the public and the commercial community have been benefited, beyond measure, while the stockholders have suffered. In the mean time the road has passed into the hands of the capitalists engaged in its construction; been finished, and is doing great service to the country. One of the most important steps taken by the present holders, was to place Mr. WILLIAM H. CLEMENTS at its head, as Superintendent. With probably more talent for that post than any man in the country, he united an untiring energy and perfect integrity. The Company were right in securing his services; and although he had the greatest difficulties, he has brought the road into order, and its business is increasing at a rapid rate. We have before us the Report of this Company up to the 1st of July, 1859, and from it take some facts which will show the actual condition of the road, viz;—

Cost of Road	\$17,099,467 67
Real Estate and Depots	618,496 00
Equipment of Road	776,320 00
Telegraph Line	14,368 77

This makes the total cost.....\$18,508,642 43

This was paid by:

Stock	\$6,584,681
Indebtedness	11,923,961

The Earnings and Expenses of the Road as given by the Superintendent, have been for 1857-'8, as follows:

The gross earnings of the road, as reported by the Auditor, have been for the year, to	
May 1st	\$755,708 60
Current expenses	486,369 49

Showing net earnings.....\$269,339 11

For 1858-'9:

The gross earnings of the road, as reported by the Auditor, have been for the year ending	
May 1st	\$881,957 61
Current Expenses	614,432 64

Net earnings.....\$267,524 97

The increase of business in the large year is about seventeen per cent., and the increase of expenses rather more. But, in these expenses are included many that do not properly belong to current expenses. In fact, up to

the present time, this road has scarcely arrived at a point, in which construction ceased, and consequently could not properly separate the real expenses, so as to show net earnings. Any Road, in order to show net earnings, must be so thoroughly constructed, as to require nothing but ordinary repairs. This is the case, as yet, with very few roads in this country. In the case of this road, the construction account was continued longer, than is usual, in consequence of its great embarrassments, and the comparatively new country through which it passes. In regard to expenses, Mr. Clements justly says:

"The working expenses have been 69½ per cent. of the gross earnings. Allowing for repairs made, not due to current wear, the loss by low rates and the cost of floods, the working expenses would be about 61 per cent. of earnings.

"You are aware that the ratio of expenses to gross earnings is no criterion of economy in working a railroad. While a short line with large receipts might be justly charged with extravagance, when its expenses take 45 per cent. of its earnings, a long line with light receipts, though absorbing ninety per cent. in expenses, might be characterized by the closest economy of management.

"To arrive at a just estimate of the economy of management in any case, it is necessary to take into consideration all the circumstances of condition in regard to the road in question: the condition of track, the quality and character of grade and curvature, the proportion of bridges, the security of the track by fencing or otherwise, facilities for handling freight at stations, the condition and character of the equipment and conveniences for repairing the same, and rates received for transportation, depending on competition and other influences, and varying on different roads, all form the elements which enter into and control the question of economy, when applied to railroad management."

The mileage of engines was 589,168 miles and the average cost of fuel seven cents per mile.

In conclusion, Mr. Clements says:

"The location of the Road in a sparsely settled country, the condition of the track and equipment, and financial embarrassments of the Company, have rendered it impossible to manage its business with that economy which, under other circumstances, might have been reasonably expected.

"Mistakes no doubt have been made, and all that is claimed for the management of the road, is that an earnest effort has been made by the Officers, Agents and Employees, for its success, under, at times, very discouraging circumstances."

The number of passengers was:

THROUGH	19,179
LOCAL	235,812
Tonnage	Tons. 161,102

The principle articles carried were:

Cattle.....	3,500
Horses and Mules.....	4,000
Hogs and Sheep.....	80,000
Flour.....	109,000
Corn.....	140,000
Coal.....	28,345
Sugar.....	2,000
Groceries.....	13,100
Wheat.....	350,000
Merchandise.....	26,173

No road in this country has better prospects than this one, for the very reasons which have retarded it.

1. We remark, that the southern part of Indiana, through which this road passes, has been, and is a comparatively unsettled country; and yet, this region is rich and capable of being greatly improved, and will be populous. With the growth of the country, the business of the road will increase.

2. To give full effect to the Ohio and Mississippi Railroad, it was necessary that all the connecting roads should be completed, and the circle of internal commerce, which must in the end be tributary, be completed. But, this is by no means the case! One of the most important of these is the *Ohio and Mobile Road*; another is the *Missouri Pacific*; and another is the *Cairo and Fulton*. These West and South-western Roads must at some time give an immense increase of business to the Ohio and Mississippi, and the latter will ultimately fully realize the hopes of its projectors.

THE GREAT WESTERN RAILROAD,

We have received copies of two important pamphlets relative to the Great Western; one being the half-yearly report of the Directors, which ought to have been circulated two months ago, and the other entitled "A Few Facts relative to the present position and Management of the Great Western Railway of Canada." It is published in England, and, we understand, has been extensively circulated there. The writer goes fully into the subject of the management of the line, and sets out by saying: "A deep conviction has undoubtedly settled itself throughout the entire body of the proprietors that serious mismanagement has been allowed to prevail on the part of the Company's officers in Canada, and an almost criminal neglect of duty on part of the London Board." He then goes on to say:

"The first subject for consideration will be the large and continued increase in capital since the reported completion of the line in 1855. At this time the main line had been one and a half year in operation, and the shareholders had received from then chairman the strongest assurances that the capital account would not be any further increased, except for the purpose of meeting the increase of traffic as it might occur. The Directors' report for the half-year ending July 31st, 1855, under the head of "Capital Account," shows that the sum of \$14,058,240 had been expended on construction account up to that date. In the same report, the Company's Engineer estimates that about \$380,000 or \$400,000 more would be required to fully complete the line, stock and buildings. This includes \$100,000 considered necessary for the exigencies of the increasing traffic.

Turning to the Directors' Report for the half-year ending 31st July, 1856, at page 33, it will be seen that the Capital Account for the Main

Line, and Galt and Toronto Branches (the latter having been amalgamated during the year) is set down at £4,558,513 11s. 5d. Provincial Currency, equal to \$18,235,054. The Directors further state, at page 36, that "the total sum now required to complete and stock the present line" is £124,149 4s. 7d. Provincial Currency, or \$1,796,597. This was to include everything that could possibly be required to "complete the Line in all respects, with ample facilities in the shape of rolling stock, sidings, and buildings, to carry a very large traffic." The only thing afterward excepted as not being included in this estimate was the "Passenger Station at Toronto." In this Report we do not find any report embodied from the company's Engineers to explain the enormous discrepancy between the amount estimated to "complete" the Line, in all respects, for the increase of traffic in 1855 and 1856. Surely the addition of the Toronto Branch of 39 miles, which was supposed to be completed at the time of its amalgamation, can not have required so large an addition to the estimates for "completion." This word "completion" it is to be feared, has a very wide and elastic significance in the minds of the Western of Canada Directors, or at least with those sent out to manage affairs in Canada.

The Canadian and London Board Rooms of this Company, seems like a certain other place, which it would not be polite to mention here, to be paved with good intentions and resolves. The promises of the Directors, like a certain Eastern fruit we read of, are fair to the eye but bitter and worthless. By the last mentioned report (31st July, 1857), it will be seen that the limit set to the capital account was already exhausted, making allowance for the outlay on the Sarnia branch. But instead of following up the discrepancies between the Directors' estimates and promises, and the results, we will give a table showing the large yearly increase in the Companies Capital Account, since the line was pronounced to be within \$400,000, or £80,000 sterling, of completion.

EXPENDITURE.

		Miles open.
To 31st July, 1855.....	\$14,058,240	240
To 31st " 1856.....	18,234,054	280
To 31st " 1857.....	21,001,740	280
To 31st " 1858.....	22,858,262	291
To 31st Jan., 1859.....	23,379,149	345

With regard to the management, and certain other matters which have been freely discussed in this country, the writer says:—

As a large number of the English Proprietors are indifferently informed as to the manner in which their property is managed, it may be as well to allude to the machinery through which their affairs are conducted. The Acts of Incorporation provide that the Company's affairs shall be managed by eleven Directors, to be chosen annually by the body of Proprietors. When the shares and bonds of the Company were first introduced into the English Market, the whole Board was composed of Canadians and Americans, and in order to give confidence to English capitalists, and induce them to invest in the undertaking, a Committee of Management was constituted in London, who soon acquired, through the large amount of shares subscribed in England, the power to control the election of the Canadian Board. This power, however, it is right to say, was freely tendered by that Board at an early period of the English connection with the enterprise. The first exercise of it resulted in the appointment as Managing Director of Mr. C. J. Brydges, a young man, who held, at the time of his nomination, a subordinate situation in the Secretary's Office of the London and South Western Railway Company. This gen-

tleman had all his Railway experience to acquire when he took upon himself the almost supreme control of a great Line, situated nearly 4,000 miles distant from those who were to supply the money for its construction. The work of construction itself was as yet in its incipency, and it would be difficult to form any idea of the disadvantages which a person in Mr. Brydges' situation must necessarily have been subjected to, surrounded as he was by greedy and unscrupulous contractors, who are said to have acquired rapid and almost fabulous fortunes, through, as has been alleged, the connivance or complicity with the professional men then and for sometime after in the Company's employ. But as this matter is already well understood in this country, it is unnecessary to dwell upon it.

To return to the question of machinery of management, after a time the Managing Director found it to be inconvenient to have so large a Board to work with in Canada, and an Act was obtained from the Provincial Legislature to enable Directors residing in England to vote by proxy at the Local Board in Canada. Since then, a part of the eleven Directors have been nominated in England, and a part in the Province. Since 1854 it has been the practice to send out an assistant English Director to watch the proceedings of the Manager. These two, together with the four residing in England, who now constitute the London Board, form an entire majority of the authorized number of eleven. Now, as the two residing in Canada hold the proxies of the other four English Directors, and have besides the nomination of the five Canadians, they must as a matter of course hold the controlling power at the Local Board. In fact, the Canadian Board is a mere farce.

With reference to the falling off in the receipts of the road, and position in which the Company stand with the Detroit and Milwaukee line, we have the following:

It would, no doubt, be unreasonable for the Shareholders to expect the receipts of their Line and Branches to maintain the same standard during years of commercial and general industrial depression, that they exhibited during years of great prosperity, or monetary inflation. Their interests nevertheless, demand that they should most carefully inquire into the causes which have created such violent fluctuations in the traffic receipts. The gross receipts for the year ending 31st July, 1857, were \$2,872,149, whilst for the year ending 31st July, 1859, they amounted only to \$1,923,922, according to the footing up of the published weekly traffic. There is, therefore, a falling off in the gross traffic receipts for the latter year as compared with the former, of \$948,227, or one-third. Whatever may have been the causes which have produced this vast difference between the receipts of the one year cited as compared with the other, all must admit that, had the capital expended in the construction of the of the several branches, excepting, perhaps the 38 miles from Hamilton to Toronto, been expended in paying off the debt due to the Canadian Government, and the large sum—about \$1,000,000—said to be due to the Commercial Bank of Canada, the Company's financial position would not have been as it is. To these worse than useless outlays, as we believe them to have been, must be added the money utterly sunk in building the steamers *Canada* and *America*, amounting, with interest and losses made by running them, to over \$500,000. It is also believed by many that the £250,000 sterling, over \$1,200,000 loaned to the Detroit and Milwaukee Company can never be recovered, and is in like manner wholly sunk.

The reader will be able to form a pretty correct opinion of the value of the security held by the Great Western of Canada for this loan, by a glance at the financial condition of the Detroit Company as given their last report, endorsed by C. J. Brydges, Esq., as Chairman of that Board. It will be seen by reference to the Capital Account, (No. 1.) contained in this Report, that the paid up Share Capital is \$2,329,154. The larger part of this sum it is alleged, consists of free shares given to the Company's Agents, and financiers in England, for their services in inducing the Great Western of Canada Shareholders, in their individual and corporate capacities, to make advances upon the Company's bonds, and other equally valuable securities, and to Contractors. Be this as it may, the amount paid up Share Capital, as compared with the sums borrowed, it will be seen, is very insignificant. The Company's debts secured by Mortgages—1st, 2d and 3d, all of which take precedence over the Great Western Company's loan, are as follows:—

Sterling bonds, Oakland & Ottawa Company 6 per cent.....	155,000
Dollar do 7 do.....	51,000
" " Detroit and Pontiac Company 8 per cent.....	500,000
" " Detroit and Milwaukee Company 7 per cent 1st Mort.....	2,400,000
" " Detroit and Milwaukee Company 8 per cent 2d Mort.....	751,500
" " Detroit and Milwaukee Company 10 per cent 3d Mort.....	750,000
Total.....	\$4,707,500

This will give some idea of the nature of the Great Western Company's security, as it will thus be seen that it stands number four or five on the list of mortgages. The three prior mortgages, as well as the bonds issued by the Pontiac and Oakland and Ottawa Companies now merged into the Detroit and Milwaukee Company, which constitute a first charge upon this Company's resources, all fall due within from two to 15 years—a large amount within three years from this time.

* * * * *

At the time that the Detroit and Milwaukee scheme was first introduced to parties in England, some five or six years ago, the charter for the Line from Port Huron to Grand Haven was under the control of another set of men, and the latter scheme was consequently a rival to the former. The prominent Directors of the Detroit Company, who have since obtained the control of the Port Huron project, then strongly argued against the latter route, which they now hold up as indispensable. They alleged in 1854 that, for the Great Western Railway to build the Sarnia branch, and afterward the Line from Port Huron to Grand Haven would be to construct fifty or sixty miles in Canada to compete with a portion of their own Main Line west of the Sarnia intersection, and that Detroit being the great commercial center of the State of Michigan, any Line which did not tap that City could not command a paying business. It would be absurd, argued these very disinterested persons, when they were seeking for money to build the Detroit and Milwaukee Line, to suppose that a sufficient number of passengers would take the shorter Line by Port Huron and Sarnia to warrant a the Great Western in running a special train Main Line to carry them east from the Sarnia intersection *vice versa*; and that consequently there would be nothing gained in point of time by the shorter route. In fact, that the trains running upon the shorter route would have to be suited to the time of those running upon the longer one *via* Detroit.

Now, if these arrangements had any force at the time, they have acquired great additional strength since the Main Detroit and

Milwaukee Line has become so intimately connected with the Great Western. Will it not strike those having money invested in this Line, and also in the Shares of the Great Western, that by building another hundred miles, from Owosso to Port Huron, they are only constructing so many miles to compete with their already existing Railways in Michigan and Canada, for a business which they now control just as effectually as if the saving of some 30 or 40 miles were effected. Let people, before agreeing to advance money towards constructing this Port Huron and Owosso branch, which, as the contracts are let and are to be managed, will cost between four and five millions of dollars by the time it is finished, ask themselves, whether the saving of an hour or an hour and a half in the carriage of such passengers as may cross Lake Michigan during four or five months of the year, will cause such an increase in the number of such passengers as to warrant they outlay of so large a sum? This is the great question. Even supposing that enough passengers should avail themselves of the shorter route to warrant a special train, will they be able to gain one minute in going to New York and Boston, and *vice versa*, as compared with the already existing routes? We are assured by some of the highest Railway authorities in the State of New York that there will not be a gain of even the one minute, inasmuch as the identity of interests between the two most valuable feeders of the Great Western of Canada, the New York and Michigan Central Companies, must for all time to come prevent the former Company from running trains expressly to facilitate travel over a Line which is undoubtedly a competitor to the Michigan Central. This argument of the Great Western Directors as to the saving of time by means of the Port Huron route is merely calculated to mislead their constituents. It is well known to many of the Great Western Shareholders, that the Managing Director was not always so ardently in favor of these Michigan Lines. His sudden conversion is said to date from his visit to this country in the autumn of 1867, when he had many long and no doubt interesting interviews with certain great Railway financiers, whose aid had been invoked on behalf of the Michigan Railways. From that time Mr. Brydges became a devoted advocate for the Michigan Lines, and has since lost no opportunity to say a good word in their favor.

While speaking of these Michigan Railways we desire to draw the attention of the Great Western Shareholders to some facts relative to the manner in which the work of construction has been performed. We have already stated that large contracts have been let to Directors. These contracts have not been limited to so much per mile, but have been let in items—for instance, so much per yard for the various kinds of material requiring to be excavated, or moved, so much for grubbing, bridging and for culverts, per mile, or lineal, or cubic foot, &c., &c. In this way the cost might be swelled to almost any given amount, to benefit the contractor, should the engineer be disposed to favor him. Now the effects of this system will be seen by the following extract from a pamphlet recently published in Detroit, by Messrs. S. and C. Howard, the Contractors, who constructed 54 miles of the Detroit and Milwaukee Railway. These gentlemen are men bearing a deservedly high character in Detroit and wherever they are known, for integrity and uprightness in all their dealings, and it would seem from their language, they are certainly not favored contractors. They say at page 5 and 6 of their pamphlet, dated April 2d, 1859,

"All we got for building the 54½ miles of road, (meaning railway) including side track, which our contract covers, is only \$6440.84 cents per mile, three-fourths in cash, and one-fourth in stock and bonds." This is *less than one-third* of what the balance of the road has cost, according to the amount of work done, and materials furnished, and while the favorite contractors have got their pay in full, we are kept out of about one half of ours, through the erroneous or *false* statements of a *mercenary* engineer, and the willingness of others of more character to blindly accept of this kind of aid to their finances. Again, at page 59, the Messrs. Howard's say, "If the balance of the road had been built at as low a price as ours, the stock would probably have been worth near par at this time. The work on our division of the road (the first 54½ miles, including side tracks,) has cost the Company less than one third what the balance of the road has cost according to the amount of work done. The Company paid N. P. Stewart, and other Contractors west of Owosso at the rate of \$20,847.28 per mile, for doing the same kind of work that we did for \$6,440.84 per mile, while the amount of Mr. Stewart's work did not average over about three fourths as much per mile as ours did. Mr. Higham's (the Chief Engineer's) original estimate made the grading on his (Stewart's) work, 657,409 yards, (cubic) or 39 miles of the road. The lines of the road both grade and lateral, were so changed and the work was so reduced, that Mr. Higham had to add from 54 to 60* per cent to the estimates rendered to the sub-contractors (for the actual amount done,) to bring it up the *original or former estimate*. This was averaging the whole line from Owosso to Grand Haven. These facts Mr. Higham swore to, in giving his testimony in a suit between Thomas Mason, & Co., (sub-contractors) and N. P. Stewart, in the Circuit Court of Wayne County, on the 24th April, 1858. It will be seen by this, that Mr. Stewart got about four times as much *per yard*, for work under his contract as we did under ours, or will get when the Company pay us the balance of our account." The italics are the Messrs. Howards. In another part of their pamphlet they state that the work performed, and the materials supplied by them for \$6,440.84; and by the favored contractors N. P. Stewart, for \$20,847.28 per mile consisted of. In both cases the contractors "supplied all materials except rails, chair, spikes, and ties," (which were found by the Company) and did all the grubbing clearing (through forest land) grading, bridging, culverting, cattle guards, and road crossings, track-laying, putting in of switches, and distribution of iron and cross ties," &c., &c.

The alleged hostility existing between the Great Western and other roads is thus alluded to:

It has been stated, and we have reason to believe truly, that the Managing Director has for some cause or other, and for some time past, been hostile in feeling towards his old friends, and it may be that this feeling has impelled him into the warm advocacy of the new lines in Michigan. Some such sentiment must have driven him to commit the extreme folly of entering into a lease of the Buffalo and Lake Huron Railway last Spring, or Winter. He no doubt hoped by this means, to render the Great Western independent of his old allies, by forming a connection with the bankrupt New York and Erie at the East, as he had already done with an equally insolvent line at the West, a line depending upon its through

This 54 to 60 per cent of course constituted Stewart's profit.

traffic upon a ferry 85 miles in length across the most dangerous and stormy of all the great Lakes. It was, no doubt, a most fortunate thing that his superiors in this country had the moral courage and discrimination to promptly repudiate the act.

It has been a great, and perhaps now an irretrievable misfortune, that the Company had not employed a person to manage their property, who would have been content to have allowed the Main Line from the Suspension Bridge to Detroit, to stand upon its own merits. As such, it must be admitted, that it would have been a splendid property, and the shares would now be quoted at a high premium, instead of at a great discount. To retain in power the restless spirit who has continually demanded fresh sums of money to squander upon unproductive branches and extensions would be little short of insanity. It is now worth while for the proprietors to stop to enquire who is to blame for the deplorable blunders already committed—whether the Managing Director, or those who employed him. The damage is done, and it is only needful to enquire into its extent in order to provide measures for a permanent remedy.

The foregoing extracts embrace the leading points in the pamphlet, and we submit that the production was well calculated to produce, a powerful effect upon the minds of the shareholders, as all would doubtless have an opportunity of pursuing it before the meeting of the 5th inst. took place. The Report of the Directors we will give at another time.—*Hamilton Spectator.*

SUNBURY AND ERIE RAILROAD.

This work is rapidly approaching completion. The importance of the road has been considered, and the section of country through which it passes is attracting notice. We are personally acquainted with the section of country traversed by the road which is least known, and some facts in regard to it may not be uninteresting. The nominal southern terminus of the road is at Sunbury, a small, but growing city on the Susquehanna, about two miles below the junction of the West Branch with the main river. There is nothing attractive about Sunbury at present, except its prospects, and the fact of its being a considerable coal depot; but there is no doubt that it will before many years rank among the most flourishing of our inland cities. In the angle formed by the junction of the two rivers is situated Northumberland, a town which some years ago thought to be destined to a rapid growth, and to be a place of considerable importance. Such expectations, however, have been sadly disappointed. Northumberland has been for many years at an entire stand still, if not positively retrograding. To the slowness and want of liberality of some of the most prominent property-holders of the place is attributed its failure to justify the hopes formed of its future. At present it is mainly supported by the lumber-interest, for being at the mouth of the West Branch, quantities of lumber with their owners and hands are obliged to tie up at that point, when the main stream is not in order for running, or else to sell there. Opposite Sunbury is the village of Shamokin, and on that side of the schute in the Shamokin canal dam, once formidable to raftsmen. Not far above Northumberland is Louisburg, but on the opposite side of the river from the railroad track. Louisburg is a thriving place, and most beautifully situated. The country about is very fine and fertile, and the scenery as attractive as could be desired. The road passes up the West Branch to Williams-

port, through a section of country, most of which is very fertile and beautiful. Williamsport is a well known and thriving business place, destined one day to take a front rank among our inland cities. Large quantities of lumber are manufactured there, and in the river is a boom of several miles in extent for catching logs during the freshets in the Spring and Autumn. An immense amount of capital and labor is employed in the numerous extensive mills at this place.

From Williamsport to Lock Haven, a distance of about thirty miles, the road passes through a valley of unsurpassed loveliness.—This valley, though not so extensive, is said to exceed in beauty even the famous Wyoming Valley, in Luzerne county. Cosmopolitan travelers have pronounced the scenery in this section equal to any in the world. About half way from Williamsport is situated the thriving village of Jersey shore. Lock Haven is a town containing at present some three or four thousand inhabitants, but is rapidly increasing, and promises to be a large and flourishing place in a few years. It is beautifully and advantageously situated, and is surrounded by rich and lovely valleys. Considerable quantities of lumber are manufactured at the extensive mills here, and the place is a point for the exchange of lumber from up the river. Above Lock Haven are coal mines, somewhat extensively worked—those on the Tangascootac Creek employing a steamboat to tow their canal boats to and from Lock Haven. Considerable beds of ore exist near Farrantsville, about seven miles above Lock Haven, and some years ago a company was formed and works erected for mining purposes, but the company failed. Probably these mines, and many others rich in iron ore, which are known to exist in this region, will be opened and worked after the completion of the railroad. To the mouth of the Sinnemahoning Creek, the Sunbury and Erie Road follows the course of the West Branch, through a valley, some of which is good farming land, but it is usually rather narrow. The scenery, however, is wild and beautiful. High forest and rock covered mountains bound the prospect on all sides, and between the ranges flows the pure and lovely river. About forty miles above Lock Haven, the last considerable place for a long distance the railroad leaves the West Branch, and passes up the Sinnemahoning Creek. Though called a creek, the Sinnemahoning deserves the name of river for its size, especially when swollen in the Spring and Autumn, when it is a formidable and rapid stream. Following this stream the road passes through scenery the most wild and romantic conceivable. The Alleghenies crowd thickly around on all sides, and leave scarce room for the swift stream to make its way. There is little tillable farming land in this section, but the narrow valleys are exceedingly fertile. About twelve miles above the mouth of the creek the Sinnemahoning ends, and is divided into two streams called the Bennets and Driftwood Branches. The railroad passes up the Driftwood Branch, through a country similar to that on the main stream. The region of the Sinnemahoning and its tributaries is sparsely inhabited, and the principal business carried on there is lumbering; the laborers and agents in the lumbering interest forming a large portion of the population. Large quantities of excellent pine timber are found here, and much of the land is very valuable on that account. Coal has also been discovered in considerable quantities, and iron also abounds, so that this region, after the completion of the railroad, will be a valuable portion of the State. Speculation is

going on to a considerable extent in the valuable lands in this section. Lands that a few years ago would not bring more than from one to three dollars per acre, now find a ready sale at from eight to twelve dollars, and are considered excellent property at that.

Leaving the Driftwood Branch the railroad passes through Ridgeway, the county seat of Elk county, through Saint Mary's, a considerable colony and town, entirely German—where the various Teutonic dialects are almost altogether spoken—to Warren city. The section of country along the Western portion of the road is better known, and it is not necessary for us to describe it here. The railroad is already completed, and the cars are running about eighteen miles above Lock Haven to a place called Rattlesnake, a name which is frightfully suggestive.

Concerning the immense value and importance of the Sunbury and Erie Railroad it is hardly necessary to speak. It opens the most direct communication yet established between the Great West and Philadelphia, and the country along the route of the road. The country through which it passes is exceedingly rich in internal wealth, and that the road will pay excellently there is no doubt. There is some complaint made that the Directors are very illiberal in their compensation to the property holders damaged by the road. There was considerable difficulty experienced in obtaining the necessary funds to build this line, and the desire to finish it speedily has doubtless induced the Directors to make their means go as far as possible. But they should consider that liberality and fairness in their dealings with land-owners, is much the best policy in an enterprise of that kind. Though they may not deserve it, yet, if they get a name for parsimony, it will be much to their detriment. The Road will soon compensate its bond-holders for all their investments and expenditures, though made on the most liberal scale.

Pennsylvania will soon rank, for internal improvements, where she already does for mineral wealth, as the very first State in the Union. Politically, she is already the great balancing power—the arbitrator between the two sections of the confederacy, the key-stone of the arch of States founded on the Constitution.—*Penn. Eng.*

BUSINESS OF RAILROADS LEADING OUT OF INDIANAPOLIS.—The *Journal*, of Indianapolis, has the following in regard to the business of the railroads leading out of that city:

Three freight trains are now run daily over the Indiana Central Railroad. Those going eastward are heavily laden with produce, which comprises the bulk of the freight bound seaward. We notice in the depot large quantities of flour from Louisville, received by the Jeffersonville Road; hogsheads of cured meats from Madison, and flour from points on the Terre Haute and Lafayette Roads. The quantity of flour going directly from this city is small, the local demand being such as to consume a large portion of the quantity manufactured, while a part of the remainder is held for higher prices, which we anticipate will soon prevail in the market.

Our railroads were never doing a larger business in freight than at present, and the quantity of produce going to Eastern markets will have the tendency to "ease up" the financial matters of the West. The Eastern and European markets show improvements, which have stimulated the forwarding of produce. As prices advance the surplus products of the West will move forward more rapidly, remu-

nerating our railroad companies and enabling our merchants to collect from their debtors, and to discharge their liabilities at the importing cities. Under every view of the present condition of our commercial affairs, we may look for better times next spring than were experienced at the commencement of the present year.

The amount of freights moving eastward greatly exceeds that coming westward, which is the reverse of the feature which governed the transportation business six weeks or two months ago, and presents a more favorable aspect for the interests of the West.

The passenger transportation does not increase in proportion with that of freight, and railroad companies must look to their freight business for the principal portion of their earnings. Altogether, we think there will be a better showing of gross receipts than there was a year ago.

CONFIRMATION OF THE SALE OF THE COVINGTON AND LEXINGTON RAILROAD BY THE FAYETTE CIRCUIT COURT.

A special term of the Fayette Circuit Court was held at Lexington yesterday, for the purpose of receiving the report of Wm. A. Dudley, Esq., the Commissioner appointed to conduct the sale of the Covington and Lexington Railroad. Judge Goodloe took the Bench at nine o'clock, when the Commissioner filed his report with the Clerk, in which he set forth the facts in regard to the sale—that the real purchaser of the road was R. B. Bowler, Esq., of this city; that the amount of money required by the decree, to be deposited with the Court, had been handed over promptly; that the bonds demanded for the subsequent payments had been satisfactorily made, with the names of R. B. Bowler, Thomas D. Carneal, Wm. H. Gedge, John T. Levis, John P. Winston, B. W. Foley, Lewis Collins, James G. Gedge, C. B. Sandford, and S. Reynolds. The Bond was conditioned for the payment of \$78,700 in six months, and the same amount in twelve, and the further additional same amount in eighteen months, making an aggregate of \$235,100.

After the report of the Commissioner was filed, Mr. Fisk, of Covington, representing certain stockholders, made and filed the following exceptions to the sale:

1. The judgment ordering the sale is contrary to law, and void.
2. The judgment ordering the sale is inequitable, and the sale was not necessary for the payment of the debts when they became due.
3. Because W. H. Gedge, the ostensible bidder, and R. B. Bowler, the actual bidder, were, at the time of the sale, directors of the Company, and in the matter of the said sale, acting against the direct interest and expressed wishes of the stockholders, and they purchased for their independent benefit.
4. Because the said road sold for not more than one-half its actual cost and present value.
5. Because the sale was not made in accordance with the judgment.

Mr. Fisk proceeded to argue the various points presented, in which he claimed, to give his argument in brief, that a franchise is a *privilege*—a power to use certain property for certain purposes, and that that privilege is *not* property, and can not be sold; that the franchise is the *soul of the road*—the vital principle, and that is vested in the stock, which is the property of the individual members; that in each share of the stock is a portion of the power which makes the franchise, and when all the stock is brought together, all the power of the franchise is concentrated.

The counsel further contended that the Court can not sell this franchise, or the *profits* of the franchise, as the latter is a *chose in ac-*

tion. Mr. F. admitted that the Directors could pledge the profits arising from the use of the franchise, and when the incorporation fails to pay the *profits* to the pledgee or the mortgagee, the Courts could then interfere, *but not sell the road*. The only course was to take charge of the road, and order the Directors to account for the surplus, and order the amount to be paid to the pledgee, and if the Directors fail to do that, the Court could then appoint a Receiver. The counsel resisted the intimation of the Court that there are *two* franchises in this road—one composed of the privilege to use the road, and the other of the materials of the corporation, and that the Court can not, by decree, transfer the act of incorporation to the purchaser, to be held by him as his property, and thus confiscate the stock.

Judge Goodloe remarked that the point as to whether the road could have paid all its debts before, or when they became due, had already been settled by the judgment of the Court. If that judgment was erroneous, counsel had their remedy. The points presented had already been answered in the opinion given by the Court upon which the decree was based. It was clear that a franchise may be sold, so far as it is property. If a corporation becomes insolvent, it must be sold out and dissolved. The artificial thing which the law made a person, had no longer an existence.

In regard to the exception that the purchasers are Directors of the Road, Judge Goodloe remarked that it was a well settled principle that an administrator or trustee could not be a purchaser at his own sale, but if a chancellor takes possession of a dead man's estate, his object should be, the best bidder and the highest price. The question whether the purchasers of this road were trustees for the stockholders, (being directors) did not now come up for decision, and he, the Judge, would not meddle with it.

As to the other question, whether the property sold for all that it is worth, the Judge remarked that he had not the slightest evidence to impeach either the integrity or business management of the Directors. It could not be doubted, from the developments before the Court, but that the Company was utterly insolvent; that it would take nearly fifty per cent. increase in its receipts to pay the obligations.

Judge Goodloe concluded his remarks by saying that, unless there was a considerable advance upon the price at which the road was bid off, that he should be compelled to confirm the sale made by the Commissioners, and put the parties in possession of the road. In reply to counsel, the Judge did not think he had the power to postpone the proceedings, unless he had assurances that the road would sell for a much larger sum than had been named. As there was no prospect of that, he should direct the clerk to enter the following order:

Winslow, Trustee, etc., vs. The Covington and Lexington Railroad Company et al.—This action having been heard on exceptions to the Commissioner's Report, this day returned, it is now ordered and adjudged that the exceptions be overruled, and the report of sale be approved and confirmed. But so much of said report as treats of other matter than the sale is not now acted on, but reserved for further adjudication.

Further time is allowed until the 1st day of next January for the deposit of income bonds sold before the 16th of July, 1855, and the same time is allowed to holders of said bonds to offer additional proof of the sale of their bonds before that day.

It is ordered that the Commissioner ascertain from proof to be offered him the expense and reasonable compensation of the Trustee, James Winslow, and for his counsel fees herein; also, the reasonable fee of the attorney appointed for the Trustee of the First Mortgage, and report to the Court at its next term, the Commissioner to file his report with the Clerk by the 10th day of January next.

It is ordered that the Commissioner pay out of money in

his hands the bill of printer for advertising the sale, etc., as returned with his report; that he refund to R. B. Bowler the \$20,000 deposited to secure a compliance with the terms of sale, and that a partial allowance of \$1,000 be now made the Commissioner for his services.

This ended the special business of the Court connected with the sale of the road, except the refusal of the Judge to permit the City of Covington to be entered of record as parties to the suit, to which decision the counsel excepted.

It was understood, after the confirmation of the sale, that the stockholders represented by counsel would carry the case to the Appellate Court of Kentucky, and the exceptions of counsel were noted with that view. We had assurances from gentlemen who represented Bourbon county and other stockholders that they would undoubtedly yet resist the sale of the road by application to the Court of Appeals, upon the ground, mainly, we are of opinion, that the purchasers were Directors of the road, and, therefore, Trustees of the stockholders, and could not, consequently, become legal purchasers.

Our own opinion is that the Covington and Lexington Railroad is irrevocably the property of R. B. Bowler, unless he chooses to part with the right which he has gained by the sale, and the confirmation yesterday. The stockholders, who are really the parties aggrieved, if there are any such, have shown a timidity, a hesitancy and fear of consequences that has lost them one of the most desirable pieces of railroad property in the Union. They have acted without concert, and with no settled purpose, and they have no body to blame but themselves, or their advisers. Whatever the past course of the Directors may have been, it is useless for the stockholders to denounce the purchaser of the road now. He is fortified by the decision of the Court, and the stockholders may frame their certificates as evidences of their own folly. It is useless to discuss the *causes* which brought about the sacrifice of their interests. They had the remedy, but did not avail themselves of it in time to be effectual. If the appeal be taken, which we very much doubt, we will not undertake to foreshadow the result.

In closing our report of this important railway movement, it is proper for us to say that Mr. Bowler authorized a legal gentleman to propose that he was willing to surrender his purchase upon the payment of his interest in the road, with six per cent.—not because he did not regard the purchase as a good one, but he was anxious to be relieved of the cares and anxieties of so great a burden. Mr. B. may be sincere in this offer; but we regard his investment as prospectively the most flattering that has been made in railway purchases at the West—one that, with liberal management and a decent respect for the feelings of the people along the line, will put a fortune in his purse long before the last payment of his purchase becomes due.—*Enquirer, October 30.*

RAILWAY EXPENSES.—The cost of repairs, maintenance of track, fuel and repairs of engines for the past ten years on the following prominent railways, in comparison with the total cost of operating, has been:

New York Central.....	55.41
New York and Erie.....	44.84
Hudson River.....	57.14
Galena and Chicago.....	49.52
Western.....	52.87
Boston and Worcester.....	50.90
Cleveland, Columbus and Cincinnati.....	36.31
Philadelphia and Reading.....	43.54

THE "HURON," THE MONSTER FERRY FOR THE GRAND TRUNK RAILWAY.

The Huron, as every reader in this part of the country is aware, was built for the Grand Trunk Railway, to ply between Port Huron and Sarnia, on St. Clair River, at the foot of Lake Huron. The building contractors were Messrs. Knight and Jenking Brothers. Shadrack and Henry Jenking were the master builders at their ship yard immediately above Windsor. The Messrs. J. have built a number of superior craft, among which may be enumerated the barque St. George, the steamer Canadian—built in Chatham several years since—and the L. B. Webb, built in Detroit, burned on Lake Superior, and just rebuilt by Dr. Russel. They also built the staunch steamer Windsor, which has the reputation of being the best ice-boat on the Western waters. But the Huron is destined to be known as their *chef d'œuvre*. All conversant with marine architecture, unite in the opinion that, in strength, no boat ever built in the West approximates towards her. In forming an adequate conception of this cardinal quality, we have, in a manner, to divest ourselves of all preconceived ideas on the subject. She is a solid mass of wood and iron, as the reader may see by scanning the following "statistics" of the materials of which she is composed:

Iron spikes and bolts.....	56½ tons.
Timber, flitch oak, feet.....	160,000 B. M.
" square oak, feet.....	26,512 cubic.
Outside plank, oak, ".....	98,226 B. M.
Deck plank, pine, ".....	46,425 B. M.
Stringers, beams, etc., feet.....	82,115 B. M.

The Messrs. J. commenced their herculean task about the 1st of June, since which date 110 workmen have been employed two-thirds of the time, and a somewhat smaller number the remainder.

The dimensions of the Huron are as follows: Extreme length, 225 feet; breadth of beam, 43 feet, or 53 feet over all, the guards extending 5 feet on each side; depth of hold, 14 feet. Her deck is open, being calculated for three railway tracks, each of which will accommodate six cars, and which may be adjusted to either the broad or narrow gauge. As she is intended to be propelled by the force of the current, she will be connected with the shore by a heavy chain to govern her motions. This plan has the great merit of simplicity, and will doubtless succeed; at the same time, if it should not prove satisfactory, steam will be introduced.

The stem is very raking, to enable her to make her way over the ice, but owing to the rapidity of the current in which she is destined to run, ice rarely makes, and this quality, although an important one, will not often be brought into requisition. It is sided 16 inches, and filled in with what is technically termed "dead wood," 7 feet deep, thoroughly bolted with 1½ inch iron. The dead wood consists of massive pieces of timber, too staunch, we thought, to bear such anomalous designation. An iceberg might as well spend its strength against old Atlas, as to attempt an impression upon a stem supported by such timbers. The stern is fan-tailed, with a transom 5 feet deep by 15 inches thick. The keel is sided 13 inches deep. The main keelson is 16 by 20 inches, and the sister keelsons 16 by 17 inches. She has, in addition to these, three extra keelsons on each side, 15 by 16 inches, square-fastened with 1½ inch iron. Her frames are 13 by 20 inches, two feet apart from center to center. They are twenty inches on the keel, 16 inches in her bilge, and 9

inches at the head, profusely bolted together with inch screw bolts. She is sealed from her bilge keelsons to her clamps with streaks 6½ inches thick by 12 wide, thoroughly bolted with three-fourth inch iron, square fastened. There were three streaks of clamps 18 inches wide by 5 inches thick, also fastened with screw bolts of ¾ inch iron, besides being bolted edgewise, every four feet, with 1½ inch iron, five feet long. Her beams are of white pine, two feet apart from center to center, 6½ inches thick by 12 inches deep, bolted through the clamps, each beam supported by a knee bolted with ¾ inch iron. There is also on the inside a sort of shelving piece fitted under the beams and against the clamps, well bolted with inch iron. There are four stringers, 9 by 12 inches, running the whole length of her, supported by heavy oak stanchions every seven feet. Her plank-shear is 4½ inches thick by 20 inches wide, strongly fastened with screw bolts. The fender is six inches thick by 12 wide, with two bands of iron ½ inch thick by 3½ inches wide, running completely around it. Her stanchions are 3 feet apart, surrounded with a heavy rail 5 inches thick by 13 wide. She has nine chinks with cast-iron flanges, and ten timber heads 12 inches square. The two forward chinks are of immense size, 18 by 21 inches. Her bow and stern have an outside casing of wrought iron, which also extends over her sides, to the width of six feet.

As strength and comeliness are by no means, incongruous qualities, the Huron presents a fine appearance upon the water. She draws about seven feet water, and will probably draw eight and a half or nine feet when loaded. We congratulate the Company in the possession of such a noble craft, and at the same time can not refrain from extending our congratulations to her builders, whose reputation, previously very respectable, can not but be greatly enhanced by so signal a proof of their untiring patience and superior skill.—*Detroit Tribune*.

DEATH OF ROBERT STEPHENSON, THE EMINENT ENGINEER.

The death of Stephenson comes with startling rapidity upon that of Brunel. Both men were of rare genius, and both occupying a sort of double throne at the head of their profession, they have gone to their rest together, and their rivalry has ceased. Distinguished sons of distinguished fathers, the two men who in these latter years have done most to perfect the art of travel, and in this way to cultivate social intercourse, multiply wealth and advance civilization, have been struck down at one fell swoop in all the maturity of their power. Mr. Stephenson's health has been delicate for about two years, and he complained of failing strength just before his last journey to Norway. In Norway he became very unwell; his liver was so much affected that he hurried home, and when he arrived at Lowestoft he was so weak that he had to be carried from his yacht to the railway, and thence to his residence in Gloucester Square, where his malady grew so rapidly as to leave from the first but faint hopes of his recovery. He had not strength enough to resist the disease, and he gradually sunk until at length he expired yesterday morning. If his loss will be felt severely in his profession, it will be still more poignantly felt in his large circle of friends and acquaintances, for he was as good as he was great, and the man was even more to be admired than the engineer. His benevolence was unbounded, and every year he expended thousands in doing good unseen.

His chief care in this way was for the children of old friends who had been kind to him in early life, sending them to the best of schools and providing for them with characteristic generosity. His own pupils regarded him with a sort of worship, and the number of men belonging to the Stephenson school who have taken very high rank in their peculiar work shows how successfully he was in his system of training, and how strong was the force of his example. The feeling of his friends and associates was not less warm. A man of the soundest judgment and the strictest probity, with a noble heart and most genial manner, he won the confidence of all who know him, and perhaps in all London there were not more social gatherings than those which were to be found in his house in Gloucester Square, he himself being the life of the party. Without a spark of professional jealousy in his own nature, he was liked by all his fellow engineers, if they did not know him sufficiently to bear him affection; and we do not believe that even those who had the most reason to wish him out of the way, such as the promoters of the Suez Canal, which he strenuously opposed, ever bore him any ill will. He has passed away, if not very full of years, yet very full of honors—the creator of public works, a benefactor of his race, the idol of friends.—*London Times*, October 13.

IMPORTANT RAILROAD DECISION.

Morris Ketchum vs. the Scioto and Hocking Valley Railroad Company and others. In Perry Common Pleas Term, October, 1859. H. C. Whitman, Judge. Abstract of the Facts and the Opinion.

All of the authorities cited, and much of the reasoning of the Court being omitted as unnecessary to an understanding of the propositions decided:

FACTS.

The plaintiff, Morris Ketchum, of New York, is the Trustee for the Bondholders, and is as such Trustee the Grantee of a Second Mortgage given on the first of March, 1853, by the Railroad Company, conveying the road and franchises to secure the payment of principal and interest of \$1,000,000 Bonds. This mortgage is subject to a First Mortgage given on the first of March, 1853, to James F. D. Lurier, of New York, by the Company for \$300,000, covering the road between Portsmouth and Jackson. The plaintiff alleges a default in the payment of interest due on bonds covered by the Second Mortgage, mismanagement of the Road and its funds by the Company, and the insolvency of the Company. He also alleges that the Arcade Bank, of Providence, R. I., holder of \$300,000 of the bonds as security for an indebtedness of \$150,000; and Earl P. Mason and Isaac Hartsorn, also of Providence, holders of \$305,000 of the bonds, as security for an indebtedness of \$145,000, have demanded of him that he enforce the Mortgage as their trustee. All parties interested are made defendants. The plaintiff in his petition prayed the appointment of a Receiver, the sale of the road and its franchises, and a distribution of the proceeds.

At the March Term of 1859, of the Perry County, Common Pleas a judgment by default for the sale of the road, was allowed to be taken, saving, however, to the Company, or any other party, the right within a specified time to have the judgment set aside on good cause shown; and in June, at Lancaster, the case was fully heard on the motion to set aside this judgment, and was ably and elaborately argued for the plaintiff by Hunter and Dougherty and H. Stanberry; and for the Company by Judge Thurman and O. F. Moore, and by Vachel Worthington for other parties. A Receiver, Mr. Webb, had, previously to the judgment, by consent, been appointed, in whose hands the road still is.

PROPOSITIONS DECIDED.

1. That a railway in Ohio, is a Public Improvement, for the purpose of which "the State is justified in calling into exercise the Sovereign Right of Eminent Domain," in condemning private property, for the use of the road. That although operated and controlled by private companies, the public has rights and interests therein, which can only be divested by Legislative authority.
2. No railroad corporation in Ohio can either mortgage or sell its road or corporate franchises without Legislative authority; but this authority may be given by the Legislature.
3. It would be injurious, and even dangerous, to both public and private interests, to gather such authority from implication; and it should be clear and explicit.
4. No consent of parties can give the power—or remedy the want of such Legislative authority.

5. Even where the power is clearly given by law to a Railroad Company to mortgage its road and franchises, it does not of necessity follow that a sale is therefore authorized on default of the mortgage conditions. In the absence of express Legislative provisions authorizing a sale in such case, and prescribing the terms and conditions of such sale, so as fully to guard the public interests, as well as those of all private parties, the presumption of law would be, that the Legislature only intended that the mortgages of the road should have all such relief and security, whether by priority of lien or otherwise, as could properly be given them without a sale, and this relief must generally, if not always, consist in the subjection of the earnings of the road, after proper deductions for running expenses and repairs, to the payment of the mortgage debt.

6. Section 374 of the code prescribing a sale of mortgaged property in all cases of foreclosure, does not apply to the case of a mortgage of a Railroad and its franchises.

7. In the case at Bar, the powers of the Company are governed by the General Railway Act of February 11, 1848—subject to which the Company was incorporated by a special Act passed February 20, 1849. None of the Legislative Acts concerning Railroads, passed subsequently to the Act of 1848, have increased the powers of this Company as to the mortgage, or sale of its road; and the only power conferred on the Company to mortgage is, that contained in the thirteenth section of the Act of 1848, which is as follows: "Sec. 13. Such Company shall have power to borrow money on the credit of the corporation not exceeding its authorized capital stock, at a rate of interest not exceeding seven per cent. per annum, and may execute bonds or promissory notes therefor, and to secure the payment thereof may pledge the property and income of such Company." The power thus given to pledge or mortgage the property and income of the Company, does not necessarily include the power to mortgage the road and its franchises. The word property may, without violence, be limited to such property independent of the road and franchises as the Company may own. And it is probable that such was the limitation in the minds of the Legislature giving the power; for it is hardly to be supposed that, while the Legislature was expressly giving the Company power to mortgage, if it intended to authorize the transfers of the entire road and franchises, it should not in plain terms have said so. They were undertaking by a general law to regulate the whole subject of Railroads, so as properly to protect both public and private interests, and is it likely that, while thus engaged, if they had intended to grant the extraordinary power to mortgage the road and franchises, they would have left this grant of power to be gathered by loose implication from doubtful words and phrases? A power, too, much more extensive and important than any given, and with no conditions or limitations prescribed upon its exercise—with no protection to the rights of the public or private parties. Subsequent Legislatures to that of 1848, seem to have supposed that the Act of 1848 granted no such power to mortgage, as is claimed, for they have in additional and special acts conferred on some railroad companies the power here claimed, and for the exercise of which, of course, no legislation was necessary if it existed under the act of 1848. Such was the case with the Columbus, Piqua and Indiana Railroad Company, which was incorporated in 1849, under the act of 1848. An amendment to the Charter was made March 12, 1851. Additional power was given the company to borrow money, and to secure payment the Directors were authorized "to pledge by mortgage or otherwise the entire road, fixtures and equipments, with all the appurtenances, income and resources thereof," etc., etc.; though even in this case it will be noticed that no express power of sale was granted. It has been urged in argument that the power given in the act of 1848 to borrow money properly and necessarily includes the right to mortgage the road and franchises as security. Now, if it be even conceded that the power to borrow money, when given a railroad corporation, includes the power to mortgage the road and franchises, (which doctrine, however, is by no means settled,) that can only apply in a case where there is no limitation imposed by the law on the nature and extent of the mortgage power. In this case there is a limitation, viz: "to the property and income of the Company." The general railroad act of 1848 does not then authorize any company to mortgage its road and franchises.

But, even if it be conceded that the act of 1848 does authorize the mortgage of the road and franchises, it by no means follows that a sale is therefore authorized. The Legislature might well enough conclude to grant the one power, and withhold the other. They are not necessarily dependent on each other. Valuable and exclusive rights may, by the mortgage, be given to the mortgagees. Priorities of lien may thus be held; additional security may thus be possessed by them. And it was entirely competent for the Legislature to thus grant exclusive rights by way of mortgage, and to leave the parties resting upon their mortgage rights and remedies, without extending the additional right of sale of the mortgaged property; and the presumption would be that such was the intention of the Legislature, from the fact that no provision whatever, prescribing either the terms or manner of such sale, or for any appraisement of the property, or guarding in any way the rights of the public, or the stockholders, are embraced in the law. It is wholly silent on the subject of a sale, and the existing remedies as to the sale of mortgaged property, it must be admitted, are inapplicable to the sale of railroads.

Is it to be presumed that the Legislature intended to give the high power, by a general law, to sell all the railroads, with their franchises, in the State, which might be under mortgage, with conditions broken, without prescribing a safe and proper mode of both appraisement and sale, and without the most careful and zealous protection to all the vast interests, both public and private, involved? Such presumption is repelled by the nature of the subject matter, the spirit and terms of the act of 1848, and the subsequent legislation referred to.

It follows as a legal consequence to the foregoing conclu-

sions, that when the Company in this case undertook to mortgage the road and its franchises, they acted without authority of law to that extent. They had power to mortgage the income of the Company, and any outside property the Company owned independent of the road and franchises, but no more; and no consent of parties could or can aid this defect of power. The law alone could give the power. It alone could divest the public of its interests and the Company of its franchise, and pass them to others. So far, then, as the mortgages sued upon here attempt to convey the road and its franchises, they are invalid, and cannot be enforced as mortgages; and this legal result, in the opinion of the Court, is not only in conformity with sound principles, but is sustained by the great weight of the authorities properly bearing on this case.

During the argument a good deal was said as to the momentous consequences involved in the case to interested parties, and as to public policy, public and private good or bad faith, etc. Courts of Justice, when they properly discharge their duties, look only to the law of the given case, and declare it as they find it to be. If they either omit to do that or go beyond it, they sadly fail in their duty, and become dangerous to the community. But if permitted to pass upon the suggestions of counsel, I would say that I am unable to perceive that the bondholders or others who loaned funds to this Company have any right to question the equity of the decision. They, with the stockholders, entered into a common venture. They mutually took the risks of that venture, whether for profit or loss. The result has been unfortunate to both, and much to be lamented. But this gives neither party any right to call for strained construction of laws, or the wholesale interpolation by the Courts of powers into the law which were never placed there by the law making power. Nor is there any hardship in applying to these parties, and all similarly situated, that rule of law, in all other cases applied, viz., that in the loaning of the money, and on the execution of the mortgages, both parties must be presumed to have contracted with reference to the existing laws of the State. They were bound to know them; and if they had doubts as to the extent or meaning of them in any particular, they should, before entering on their venture, have resorted to the proper authority, the Legislature, for additional legislation. Nor is it easy to perceive why the holders of railroad mortgages in the United States should have or expect the extraordinary power of sale granted, a power never granted in England, nor, as is believed, elsewhere out of the United States.

The judgment in this case is ordered to be vacated.

CHICAGO AND ROCK ISLAND R. R.

The Annual Report of the Directors of this road, made up to July 1, 1859, is printed. The length of road operated has been 224½ miles, and the earnings for the twelve months were as follows:

From Passengers.....	\$399,144 77
From Freight.....	450,245 95
From Mails.....	39,969 13
	<hr/> \$89,300 05

The working expenses have been:

For Roadway and Buildings.....	\$146,782 96
For repairs of Engines and Cars..	64,029 26
For Transportation, etc.....	326,855 71
	<hr/> \$537,667 93

Net earnings for the year.....	\$351,632 12
Deduct Interest on Bonds.....	\$97,790 00
Rent of Poor a Branch.....	125,000 00
Taxes on Real Estate.....	36,157 15
	<hr/> \$258,947 15

Balance to Income Account for the year.....	\$2,684 97
Balance to Income Account July 1, 1859.....	527,453 37

Present Balance at credit of Income Account...\$630,138 34

We average the above figures about as we find them in the report, and can not understand why the item "Taxes on Real Estate," is not classed with the ordinary road expenditures as has been heretofore done in the report of the company. If this had been done, the actual net earnings for the year would have been \$315,474 97, instead of \$351,632 12. Compared with the previous year, the actual net earnings show a decrease of \$313,554 00, and \$534,364 45, as compared with the twelve months ending June 30, 1857. The following figures show the business of the road for the past three years: (The expenditures include taxes on real estate.)

For year ending	Gross earnings	Expenses	Net earnings
June 30, 1819....	\$89,300 05	573,825 08	315,475 97
June 30, 1858....	1,407,845 72	778,167 75	629,678 97
June 30, 1857....	1,880,196 52	1,636,157 10	850,039 42

From the foregoing it will be seen the traffic earnings have fallen off more than fifty per cent. within two years, and this is owing to

the almost entire suspension of business and failure of crops. The road expenditures have been diminished in a good proportion, and we think the officers are entitled to credit for the economy practiced. The whole number of men employed by the Company averaged 928 per month, at an average cost of \$24,675 14 per month. For the previous year the number averaged 13,895 per month, and the pay \$34,777 01. Here is a decrease for the year, in salaries alone, of \$121,222 37.

The Directors say: "The consequence of the revulsion of the past two years has been so to diminish business, as to throw a large number of men out of employment; thereby giving the Company an opportunity of selecting their men more carefully. This has enabled them to do more and better work, with fewer men, than was done with a much greater number during the period alluded to. So that, although our expenses are reduced to a very low figure, our road and equipments have not been allowed to run down, and everything is in such complete order, and the working of the road reduced to such a perfect system, that very little increase of expense would be required to do fifty per cent. more business than we are now doing."

The equipment of the Company does not vary in extent from that reported the year before. It is considered ample for a large business, consisting of the following: 58 first class locomotives, 33 first class passenger cars, 8 second class do., 1 paymaster's, 4 mail and express, 11 baggage, 492 box freight, 105 cattle, 100 platform (coal), 205 platform, 48 hand (repairs), 10 four wheel gravel cars. We gave in our issue of Sept. 17th, the locomotive operations for the year. Below we compile a few facts of road operations for the years ending June 30, 1859 and 1858:

	1859.	1858.
Length of Road and branches, miles.....	224½	224½
Total number of miles run.....	739,298	707,633
Number of passengers carried.....	235,705	317,714
Passengers carried one mile.....	13,314,141	20,762,335
Tons of Freight carried.....	201,208	264,931
Total receipts per mile run.....	\$1 20	\$1 82
Total expenses per mile run.....	0 77	1 01
Per cent. of expense to earnings.....	64.52	55.03

COST PER MILE RUN.

	1859.	1858.
For maintenance of way, cents.....	18 85	23 84
For engine repairs, cents.....	5.12	7.86
For car repairs, cents.....	3.97	8.11
For wages, cents.....	5.02	6.89
For fuel, cents.....	10.09	10.18
Average cost of wood per cord.....	\$4 09	\$3 54
Average miles run per cord of wood.....	40.60	35.00
Gross receipts per mile of road.....	\$3,896 17	6,176 99
Operating expense per mile of road.....	5,514 02	3,412 12
Net income per mile of road.....	1,382 15	2,765 87
Net income per cent on cost.....	4.62	9.25

The total running expenses of engines for the year averaged 21 19 cents per mile run, and 30 03 cents for the year ending June 30, 1857.

There has been paid for balances due on Lands purchased previous to the last Reports, lands purchased adjoining some of the stations, and for additional side track, the sum of \$58,407 26. This is charged to "Construction account." The General Account of the Company stands as follows:

LIABILITIES.

Capital Stock account.....	\$5,603,000 00
Mortgage Bonds.....	1,397,600 00
Unpaid dividends.....	492 50
Northern Indiana Railroad, (unadjusted balance).....	5,158 00
Profit, balance of income account.....	630,138 34
	<hr/> \$7,635,688 84

ASSETS.

Cost of Road and Equipment.....	\$6,775,118 59
Land Damages and Real Estate for additional station grounds, including new side track.....	53,407 26
Railroad Bridge Company.....	155,208 90
Illinois and Mississippi Telegraph Company.....	13,785 52

Sinking Fund.....	42,000 00
Sundry small balances.....	5,231 62
1,015 Shares Chicago and Rock Island R. R. Co. Stock.....	101 500 00
Stock of Fuel on hand.....	107,015 95
Iron and Other Materials on hand.....	91,535 24
Balances due from other Roads and Cash in Cashier's hands, Chicago.....	161,546 47
Cash in hands of E. W. Dunham, Treasurer.....	118,379 30
Total.....	\$7,635,788 84

The Company has made no dividend during the past two years. As will be seen by the above balance sheet, a sinking fund has been commenced for the liquidation of the funded liabilities of the Company. The principal officers are:

President, Henry Farnam, Chicago, Ill.; *Treasurer*, E. W. Dunham, New York; *Secretary*, Francis H. Tows, New York; *Superintendent*, John F. Tracy, Chicago, Ill.; *Master Mechanic*, Jacob Barney, Chicago, Ill.—*Am. Railway Times*.

FACTS ABOUT GOLD.—The continent of America, from its discovery in 1493 to 1848, produced \$1,944,657,000 of gold. The amount now annually yielded throughout the world is \$200,676,000.

During eight years ending Dec. 31, 1857, the gold coined at Paris amounted to \$505,000,000.

In England during the seven years ending December 31, 1856, the coinage was \$221,429,361.

The annual increase of gold coin in the United States is about \$25,000,000.

A cubic foot of gold weighs 1219 pounds, and is worth \$309,760.

A block of gold measuring 30 feet each way would be worth \$8,363,520,000, which is more than has ever yet been taken from the earth.

RAILROAD COMBINATION.

The Combination of the Cleveland & Columbus, Sandusky, Dayton & Cincinnati, Springfield & Delaware, and Cincinnati, Hamilton & Dayton interests.—The arrangement for a division of business between the lines indicated takes place to-day. A stockholder in the Cincinnati, Hamilton & Dayton Company desires the publication of the following as an expression of the view taken of the new contract by the managers of that corporation, and some explanation of its relations to the Dayton and Michigan Road:

At the present time both the Sandusky, Dayton and Cincinnati and Dayton and Michigan Companies claim to do an Eastern and Northwestern business, and that they have equal advantages for the transaction of the same. The Dayton & Michigan have the most direct line to the North and Northwest, and would seem from her geographical position, to be entitled to claim the preference in that direction; whilst the Sandusky line, though having 12 miles more rail, has the shortest rail and water line by 50 miles to Buffalo, and lays claim from her position and contract to a preference. The rivalry of these two companies bids fair to destroy any profit on business from Cincinnati to the North and Northwest, as that to the East has been destroyed, in a great measure, by the rivalry of the Railroads, Canal and River. The object of the C., H. & D. Co. is to escape injury from this rivalry, by defining and maintaining her position.

The C., H. & D. Co. has labored under great disadvantages to the present time, for the want of a good all-rail route to the East, such a one as would enable her to successfully compete, at all seasons of the year, for business. Having heretofore only a summer route East for freights—she has once a year lost her custom-

ers, and every spring had to seek them again. This great difficulty is now removed by the opening, both for freight and passengers, of the Delaware route, which is the shortest between Cincinnati and Cleveland.

The parties to the contract for opening the Delaware line are the C., H. & D., S., D. & C., S. Mt. V. & P., and C., C. & C. Companies.—The Dayton & Michigan Road forms no part of the line, and consequently the D. & M. Co could not properly be made parties to the contract.

The same contract defines the business which the parties conceive most naturally belongs to each connection of the C., H. & D. Road, viz: The all-rail business via Cleveland and Pittsburgh, to the Delaware line: the rail and water business for Buffalo, to the Sandusky line; and the business to the North and Northwest, as well as Canada, to the Toledo line; but each interest, or company, is left free to procure business in Cincinnati, which is to be done over the C., H. & D. Road on equal terms and at the same price. In case either Company connecting with the C., H. & D. Road, and of the three lines named, reduce rates to competing points East, North or Northwest, below those agreed on by all the parties interested, the C., H. & D. Company stipulates to charge such Company local rates to and from Dayton. This is for the mutual protection of all her connections.

The C., H. & D. Company agrees to represent, advertise and work for the Dayton and Michigan, the Sandusky, Dayton and Cincinnati, and the Delaware lines, as herein before named—leaving each Company composing a part of any of the lines, to advertise, work for and obtain all the business she can in Cincinnati, to be carried over the C., H. & D. Road at the regular pro rata rates.

In making the Delaware contract the C., H. & D. Company have aimed to do equal justice to her connecting roads—to provide herself with the best all-rail route to the East—and to put herself in position not to carry freights below cost both East and North in consequence of the rivalry of her connecting roads.

ROANOKE VALLEY RAILWAY.—The yearly meeting of the stockholders of this railway was held at Townsville, N. C., Oct. 13th, 1859, when Mr. Henry Wood, of Clarkville, Virginia, was re-elected President. The Directors are—Joseph R. Anderson, Richmond Va., and Wm. C. Marrow, Jr., Norfolk, Va.—State Directors: James E. Harkins, Dr. H. S. Harris, and Geo. C. Scott, of Clarkville, Va., and S. S. Daly, Boydton, Va. The road earnings for 12 months ending Sept. 30, 1859, were \$21,056 72, expenses, \$10,317 00; leaving as net earnings, \$10,739 72.—*American Railway Times*.

GEORGIA RAILWAY IRON.—It is gratifying to note the extension of the iron manufacture throughout the country. Eleven car loads of rails passed through Griffin, Ga., recently, on the Macon and Western road, shipped from the Atlanta Rolling Mill to some point below. We have noticed some of this iron passing up the State Road, says the Dalton Times, and it will compare favorably with any we ever saw. Every year Georgia is becoming more independent, and in a very few years more she will be able to manufacture everything she needs. Her mineral wealth is inexhaustible—indeed she has every element to make her a great State, and we long to see the day when she will not have to look to the North for anything.—*American Railway Times*.

NEW WAGON ROUTE TO THE PACIFIC.—Gen. Swift, of Washington Territory, writes that Lieut. Mullen is now engaged in constructing a wagon road from Fort Walla Walla to Fort Benton, which he will complete the present season as far eastward as the Bitter Root Valley, where he will winter. From the last named point there is already a good natural road to Fort Benton. Emigrants to Washington, Oregon, or Upper California, will therefore have the choice next spring between this and the old routes of travel. The letters above named speak in the highest terms of the new route, asserting that it is entirely feasible for heavy loaded teams, abounding in wood, water and grass the entire distance from Fort Benton to Fort Walla Walla. It will be remembered that during the past summer a steamer ascended the Missouri river to Fort Benton, with two hundred and eighty tons of freight, thus demonstrating the feasibility of navigation to that point. Fort Benton is situated ten miles below the Great Falls of the Missouri, in latitude 47 deg. 20 min., 109 deg. 45 min., and is about 3,000 miles distant from St. Louis. On the western slope of the mountains the Columbia is navigable by steamer to the mouth of Snake River, which is only 600 miles from Fort Benton. By this route, therefore, land carriage, in a trip across the continent, is reduced to the last named distance, with a corresponding reduction in time and the fatigue and hardships of an over land journey.

SOUTHERN PACIFIC RAILROAD—ITS FUTURE PROSPECTS.—After a long series of delays and lawsuits, the Southern Pacific Railroad seems to be once more in a fair way to prosper. The difficulties with old companies and with the State of Texas have all been settled. The Company, as now organized, does not owe one dollar. It has possession of the road—has resumed the work—is repairing the road—building work shops, engines and depot houses; and the stock liability amounts to \$2,088,000, composed of stock of the old company and the new. The capital is fixed in the by-laws at 700,000 shares of \$100 each, making a nominal stock of seventy millions, or equal to an actual stock of \$3,400,000, with five per cent. only paid. Part of this stock having been disposed of, the remaining 282,400 shares equal to \$28,240,000 of nominal stock, producing, when the same is actually sold, \$1,412,000 of stock, is to be sold under an order of the Board of Directors, to purchase negroes for the construction of the road. In this way all the capital stock will be disposed of; and the remaining stock is to be distributed among the first stockholders. In the apportionment of stock, \$50,000 has been set down for Ohio, and R. S. Newton of this city appointed Agent.

Under the new management, J. Edgar Thomson, Esq., of Pennsylvania, has been elected President of the Pacific Railroad Company. He is one of the best Civil Engineers in the country, and when he accepts, will enter upon his duties with the determination to put the road through.—*Enquirer*.

The earnings of the Troy and Boston Railroad for the six months, ending September 30, were:

1859, from 47 miles.....	\$115,817
1858, from 32 miles.....	75,932

Increase.....\$39,884

The Rock Island Road earned the second week in October:

1859.....	\$28,126
1858.....	21,966

Increase.....\$6,160

MONETARY AND COMMERCIAL.

The improvement in money matters noticed in our last weekly review, still continues; the demand, however, is fully equal to the supply of capital, and but few parties are put to inconvenience with surplus funds. The great bulk of the available means of the discount houses is absorbed by produce men to the exclusion of other branches of trade. Rates are without change to depositors, viz., 10 to 12, but may be quoted a shade lower to "outsiders."

Eastern Exchange has declined $\frac{1}{2}$, buying rates being 37@10, and selling 50 prem. for New York sight, New Orleans is $\frac{1}{2}$ prem. selling, par buying.

	BUYING.	SELLING.
New York Sight.....	37@40 prem.	40@41 prem.
Boston.....	47 prem.	47@48 prem.
Philadelphia.....	37@40 prem.	40@41 prem.
Baltimore.....	37 prem.	40@41 prem.
New Orleans.....	par.	41@42 prem.
American Gold.....	37 prem.	40@50 prem.

The money market at the East is marked by continued and increasing ease. The New York *Courier and Enquirer*, of October 31st, says the month closes with a money market highly favorable to borrowers. The Brokers readily obtain money at 5 to 6 per cent. on prime collaterals, and the Banks are more inclined to loan "on call" at 6 to 7. The continued ease in the money market is confirmed by the Weekly Bank Statement. Our readers will be surprised to find an increase in Bank Loans to the extent of more than a million of dollars. The Specie Reserve is again larger, notwithstanding the heavy foreign export. The changes compared with the preceding week are as follows:

In Loans, an increase of.....	\$1,096,000
In Specie, an increase of.....	341,000
In Deposits, an increase of.....	1,516,000
In Circulation, a decrease of.....	134,000

The Sub-Treasury Balance is larger than at any other week in October.

Stocks at the First Board were quiet, and but little variation in prices. Virginia Sixes declined $\frac{1}{2}$, Missouri Sixes advanced $\frac{1}{2}$, with sales of \$58,000. Tennessee Sixes improved $\frac{1}{2}$. Pacific Mail is yet depressed and declined to day 2, closing at 70. Hudson River Shares advanced $\frac{1}{2}$. Michigan Southern $\frac{1}{2}$. Chicago and Rock Island declined $\frac{1}{2}$. Michigan Central $\frac{1}{2}$. New York Central, Michigan Southern preferred, and Galena and Chicago are without change.

AMERICAN RAILROAD SECURITIES IN EUROPE.—The London *Times* of 14th October reports the following from the Stock Exchange in American Railroads:

American Railways.	Closing Prices.
Illinois Central Six per cent., 1875.....	x.c.74@75
Illinois Central Sevens, 1874.....	75@77
" " 1860, freeland.....	87@85
" " \$100 Shares, \$80 paid.....	dis.39@37
Michigan Central Eight per cent., 1860.....	81@82
" " " " 1869.....	79@81
" " " " (sinking fund)	
do., 1882.....	80@82
Michigan Central \$100 Shares.....	40@45
Michigan S. and N. Indiana, sinking fund, 1885.....	44@52
" " \$100 Shares.....	5@10
N. Y. Central Six per cent., sinking fund, 1883.....	83@77
" " Sevens, convertible, 1864.....	9@95
" " 1876.....	91@93
" " \$100 Shares.....	71@72
Erie Third Mortgage Bonds, 1873.....	x.c.56@58
" " 1875.....	15@20
Erie Sevens, convertibles, 1862-71.....	15@20
" " \$100 Shares.....	4@6
Penn. Central Sixes, First Mortgage, 1880.....	89@91
" " Second Mortgage stg. x.c.9@93	
" " \$50 Shares.....	35@40
Philadelphia and Reading First Mort. Sixes, 1869.....	83@88
" " Second Mort. Sixes, 1870.....	73@78
" " \$50 Shares.....	21@22

The following is a statement of the present value of seven railroads terminating in the city of Boston, and their last dividends:

	Offered.	Asked.	Last dividend for 6 months.
Boston and Lowell.....	101	103	3 per cent.
Boston and Maine.....	104 $\frac{1}{2}$	104 $\frac{1}{2}$	3 $\frac{1}{2}$ per cent.
Boston and Providence.....	102	102 $\frac{1}{2}$	3 per cent.
Boston and Worcester.....	100	104 $\frac{1}{2}$	3 per cent.
Fitchburg.....	99 $\frac{1}{2}$	100	3 per cent.
Old Colony.....	106	107	3 per cent.
Western Railroad.....	108 $\frac{1}{2}$	109	4 per cent.

This last line is a continuation of the Boston and Worcester, and terminates at Albany where it meets the trade of the West over the New York Central.

An important move in Erie Railroad affairs has taken place. At a meeting of the Board of Directors on Saturday, a deed of settlement and reorganization was reported from the committee appointed at a previous meeting to prepare the same, based on the following propositions. The report was accepted, and the agreement will be sent to all the par-

ties in interest for assent and signature in a few days. It contemplates the appointment of Messrs. Dudley S. Gregory and Bancroft Davis as Trustees, to carry out the arrangement; either by Legislative sanction under the present Charter of the Company, or in case of procedure, under a legal decree which shall secure the several interests on the terms here proposed, and then a general re-organization under the general railroad law of New York:

Propositions for maintaining the Mortgage Securities, Unsecured Bonds, and Capital Stock of the New York and Erie Railroad Company, recommended by the Board of Directors for the Bondholders and Stockholders, as a basis of a contract for re-organization.

The payment of first mortgage coupons to be resumed May 1, 1860. One year's arrears at that date to be paid, as per statement below.

Amount of arrears..... \$210,000

The payment of second mortgage coupons to be resumed Sept. 1, 1860. One year's arrears at that date to be paid as per statement. Amount of arrears..... 280,000

The payment of third mortgage coupons to be resumed March 1, 1861. Eighteen months' arrears at that date to be paid as per statement. Amount of arrears..... 630,000

The payment of fourth mortgage coupons to be resumed Oct. 1, 1861, and the fifth mortgage coupons to be resumed Dec. 1, 1861. Two-and-a-half years' arrears at that date to be paid as per statement. Amount of arrears..... 875,000

\$1,995,000

The earnings of the road to be conveyed to Trustees for the payment of the floating debt, the completion of the Long Dock property, and the liquidation of the delayed Mortgage Coupons. In order of priority, which, it is calculated, will all be paid in two years.

The unsecured bonds with coupons now over due and for two years in advance, to be converted into preference 7 per cent. stock, to receive dividends out of net earnings after payment of mortgage interest, and of delayed mortgage coupons.

STATEMENT OF OPERATIONS.

Year ending December, 1860—
Estimated net earnings..... \$2,000,000

Payments:—
Floating debt and interest on same..... \$340,000

First Mortgage Interest in full..... 210,000

Second Mortgage six months' interest..... 140,000

696,000

Leaving balance applicable to completion of Long Dock and necessary works..... \$1,310,000

These are estimated to cost..... 500,000

Balance applicable to redemption of suspended Mortgage Coupons..... 810,000

Year ending December, 1861—
Estimated net earnings..... \$2,250,000

Payments—
First Mortgage Interest in full..... \$210,000

Second do. do. 280,000

Third do. do. 420,000

Fourth and Fifth Mortgage six months' interest..... 175,000

1,085,000

Balance applicable to entire redemption of suspended Mortgage Coupons and other necessary payments..... \$1,165,000

Year ending December, 1862—
Estimated net earnings..... \$2,500,000

Payments—
First Mortgage Interest in full..... \$210,000

Second do. do. 280,000

Third do. do. 420,000

Fourth and Fifth do. 350,000

1,280,000

Balance..... \$1,220,000

Of which there will be applicable to payment of interest on preferred stock created from unsecured bonds..... 630,000

And the balance is applicable to dividends upon the common stock, or about five and a half per cent..... 610,000

The Michigan Southern and Northern Indiana Railroad Company publishes the following card:

TREASURER'S OFFICE, NEW YORK, }
October 22d, 1859.

To the Bondholders Michigan Southern and Northern Indiana Railroad Company:

The Directors of the Company are compelled to postpone the payment of the interest to fall due on the 1st of November next, upon the Bonds of the 1st Mortgage of the Michigan Southern Railroad Company, and upon the Sinking Fund, and Second General Mortgage Bonds, for not exceeding sixty to ninety days from that date. The Treasurer will give due notice of the time when the payments will be made.

The embarrassments of the Company have been temporarily accumulated by a serious accident upon the Road, and the dissatisfaction of the employees, and their consequent proceedings, which have required the payment of large sums for their back wages, and delay in the completion of the Company to bring up the Pay Roll, and the consequent delay in the punctualness as due. This, and the general depression of the country, and the falling off of business in the season,

in common with all Western Roads, has absorbed, and will absorb, the earnings of the Company to such an extent as not to leave sufficient means for paying the interest on the 1st of November next.

The Directors, however, feel confident that they shall be able to pay the said interest at the above deferred times for payment, and they trust that the holders of the Bonds will be satisfied that in this proceeding, they consult the best interests of all concerned, and will readily consent to the same.

(Signed.) By order of the Board.

WM. WALKOTT, Treasurer.

Geo. Bliss, President.

The State of Tennessee has taken a deep interest in the railroad system. The actual indebtedness of the State of Tennessee, according to the annual message of the Governor, is as follows:

5 per cent. bonds issued for State stock in turnpike roads..... \$1,091,190

5 $\frac{1}{2}$ per cent. bonds for same purpose..... 137,166

Total for stock in turnpike roads..... \$1,228,356

5 per cent. bonds issued for State stock in East Tennessee and Georgia R. R. 650,000

5 per cent. bonds issued for State stock in the Memphis and La Grange R. R. 83,250

5 $\frac{1}{2}$ per cent. bonds issued for same 102,000

Total for State stock in railroads..... \$833,250

5 per cent. bonds, issued for State stock in the Union Bank, yet unpaid..... 125,000

6 per cent. bonds issued to raise capital of the Bank of Tennessee..... 1,000,000

Total for bank stock yet unpaid..... \$1,125,000

6 per cent. bonds issued for the construction of State capital, yet unpaid..... 608,000

6 per cent. bonds issued for the purchase of the Hermitage..... 48,000

Total actual indebtedness of the State..... \$3,844,606

Upon which an annual interest is paid of..... 289,388

The liabilities of the State on account of bonds loaned to internal improvement companies are as follows, to-wit:

6 per cent. bonds of the State, interest payable semi-annually, loaned to railroad companies..... \$10,348,000

6 per cent. bond of the State loaned to turnpike companies..... 57,000

6 per cent. bonds of the State loaned to Agricultural Bureau 80,000

Total amount of bonds loaned..... \$10,435,000

Bonds on Internal Improvement Companies, the payment of the principal and interest of which is guaranteed by the State, are as follows, to-wit:

The bonds of railroad companies..... 5,014,000

The bonds of the City of Memphis for the benefit of Memphis and Little Rock Railroad Company..... 350,000

Total present liabilities of the State exclusive of actual indebtedness..... 12,799,000

Add actual debt of the State..... 3,844,606

Which makes the total liabilities of the State of every character..... \$16,632,566

The official statement of the earnings of the Galena and Chicago Road for the second week of October shows as follows:

1859..... \$51,083

1858..... 34,197

Increase..... \$16,886

October of last year showed \$141,652, received as follows: First week, \$40,769; second, \$34,197; third, \$30,506; fourth, \$36,179.

DETROIT AND MILWAUKEE RAILROAD.—A correspondent of the Detroit *Free Press* furnishes that paper with the following statement of the comparative weekly receipts on the Detroit and Milwaukee Railway, from the 27th of May to the 6th of October, this year and last:

Weeks ending.	1859.	1858.	In. in 1859.
June 2.....	\$9,437.22	\$5,741.39	\$3,695.83
do 9.....	9,517.24	5,238.11	4,279.13
do 16.....	10,369.52	5,350.73	5,018.79
do 23.....	10,046.49	6,012.03	4,034.46
do 30.....	11,537.75	6,518.02	5,019.73
July 7.....	11,277.81	6,460.81	4,817.00
do 14.....	9,335.60	6,326.90	3,008.70
do 21.....	8,067.01	6,545.10	1,521.91
do 28.....	9,094.30	5,128.88	3,965.42
Aug. 4.....	10,874.37	5,901.83	4,972.54
do 11.....	10,337.70	5,947.87	4,389.83
do 18.....	11,472.24	7,202.92	4,269.32
do 25.....	11,491.53	8,219.11	3,272.42
Sept. 1.....	14,214.92	9,347.19	4,867.73
do 8.....	15,269.01	10,054.33	5,214.68
do 15.....	15,296.27	10,292.89	5,003.37
do 22.....	14,497.54	11,555.88	2,941.66
do 29.....	18,332.27	14,171.85	4,160.42
Oct. 6.....	19,688.90	13,010.86	6,678.04

This, certainly, is a very satisfactory showing, and yet the traffic over this route is still in its infancy. Next year will show a much larger increase than the present has done.

The Pennsylvania Railroad Company have declared a semi-annual dividend of three per cent., clear of State tax, payable on and after 15th of November next.

GREAT SALE OF RAILROAD LANDS. 40,000 ACRES Of the Finest Arkansas Lands, at PUBLIC SALE.

Pursuant to an order of the Board of Directors of the Little Rock and Fort Smith Branch of the Cairo and Fulton Railroad Company, made on the 8th day of June, 1859, 40,000 Acres of Land will be offered for sale at the Office of said Company, in the city of Van Buren, Crawford County, Arkansas, on

MONDAY, THE 14TH DAY OF NOV., 1859,

and from day to day until sold, being about one half of the lands attached to the First Division of said Road. These lands are advantageously situated upon, and near the Line of the Little Rock and Fort Smith Branch Railroad, which is now being placed in course of construction. They comprise some of the most valuable bottom and uplands in Western Arkansas, and are situated in the Counties of Crawford, Sebastian, and Franklin, and are within twenty miles of the City of Van Buren, and within twenty-five miles of the City of Fort Smith. This Railroad traverses a part of the finest and richest portion of the State, and its completion within five years, will afford railway communication with every portion of the Union. Immigration to this State has been steadily increasing until the better part of the Government Lands are absorbed. The lands attached to this road were selected and confirmed years ago, and are now brought into market for the first time, and present inducements to planters and Farmers desiring to emigrate from the older States, and rare opportunities to Capitalists for safe and remunerative investments. The climate is unequalled by any portion of the Great West for salubrity and health; the soil is remarkably productive, and the country well watered and timbered. The Company are in condition to make good title to the lands now offered for sale.

TERMS—One third cash; one third in six months; and one third in twelve months; notes to bear interest from date, at the rate of ten per cent. per annum, until paid. Full lists of these lands, and all desirable information concerning them, will be furnished on application, personally, or by Mail, to J. B. OGDEN, Secretary, at the Company's Office, in Van Buren.

JESSE TURNER, President.

Office of L. R. & F. S. Branch of C. & F. R. Co.
VAN BUREN, ARK., August 31, 1859. Oct. 20.

To Contractors having Capital.

THE MARYLAND AND DELAWARE RAILROAD CO. will receive sealed proposals until the 1st of December for the work and materials of fifty-three miles of Road; extending from its junction with the Delaware Railroad, at Saxon, Delaware, to Oxford, Maryland; forming the shortest connection between Philadelphia and Chesapeake Bay, at a point always unobstructed by ice, near the mouth of Great Choptank River.

The resources of the Company (which is free of debt,) consist of individual stock, State appropriations, and work already done; but they propose to make payment for the work now offered, principally in First Mortgage Bonds; which they are prepared to show will be a safe, interest paying and profitable investment.

Twenty miles of the Railroad are already graded, the entire line located and secured, and the nature of the work very favorable for Contractors.

A circular containing a map and profiles, with descriptions of the character, position, and resources of the road, will be issued about the 25th inst., and sent by mail on application to I. C. W. Powell, Secretary Maryland and Delaware Railroad Co., Easton, Md.; to whom proposals will also be addressed.

Oct. 20.

TENCH TILGHMAN, President.

WILLIAMS' CINCINNATI DIRECTORY 1860.

OUR Canvassers are now engaged collecting information for the CINCINNATI DIRECTORY for 1860, (Tenth Annual Issue.) The Directory for 1860 will be greatly improved over any former issue. It will contain, in addition to Cincinnati, Directories of Covington and Newport, a complete list of Post Offices in the United States, and many other improvements. It will be issued on the 1st of January. Subscription Price will remain as heretofore, \$2.

C. S. WILLIAMS,
194 Walnut Street.

NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith
Branch of the Cairo and Fulton Rail-
road Co., Van Buren, Ark., Sep. 10, '59.

SEALED PROPOSALS for the graduation of the First Division of twenty miles eastward from Van Buren, will be received at this office until **Thursday noon, December 1st, 1859.** The work is divided into twenty sections of about one mile each, and proposals for either a part, or the whole of this Division may be made; but no bids for less than one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise. Estimates of work done will be made on the first day of every alternate month, and payments made on the first day of the month following; and fifteen per cent. of all estimates will be retained until the completion of the contract. Contractors desiring other terms of payment may bid accordingly, as the above terms are not positively settled.

The Company having a large amount of the finest Lands in Western Arkansas, will give preference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications may be seen, and all desired information obtained, upon application at the Engineer's Office, in Van Buren.

JESSE TURNER, President.

NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith
Branch of the Cairo and Fulton R. R.
Co., Van Buren, Ark., Sep. 10, 1859.

SEALED PROPOSALS for the Masonry of the First Division of twenty miles eastward from Van Buren, will be received at this office until **Thursday noon, December 31st, 1859.** No bids for less than the amount of Masonry upon any one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise.

Contractors will state terms of payments, and proportions of money, stock and lands, and amount to be retained by the Company to secure the completion of the contract. The Company reserves the right to reject any and all bids at its option.

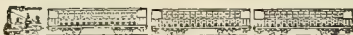
Plans and specifications may be seen, and all desired information obtained on application at the Engineer's Office, in Van Buren.

JESSE TURNER, President.

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANA OR SANDOVAL

FOR

Decatur, Springfield,
Bloomington, Peoria,
Burlington, Quincy,
La Salle, Rock Island,
Dixon, Galena,
Prairie du Chien, St. Paul, and
St. Anthony,
And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections. twice daily, at PANA for all the above points.

Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via

PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all

TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipment of the ILLINOIS CENTRAL R. R. are unsurpassed in the West.

New, Elegant Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,

Gen'l Southern Agent, Cincinnati.

W. P. JOHNSON,

Gen'l Passenger Agent, Chicago.

MOSELEY'S WROUGHT IRON ARCH BRIDGES —AND— Corrugated Iron Roofs ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders a No. 66 West Third Street, Cincinnati, Ohio.

Spt. 2.

MOSELEY & CO.

June 21, 1859.

Cincinnati, Hamilton and Dayton



RAILROAD.

FOUR TRAINS

LEAVE THE SIXTH STREET DEPOT DAILY

TRAINS RUN THROUGH TO RICHMOND, LIMA, SANDUSKY, AND DELAWARE WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND NORTH-WESTERN CITIES.

(Columbus time, which is seven minutes faster than Cincinnati.)

6 A. M. EXPRESS TRAIN—For Cleveland and Pittsburgh, via Delaware, makes close connection at Crestline for Pittsburg, Baltimore, Philadelphia, and New York; and at Cleveland for Dunkirk, Buffalo, Boston and New York. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 7:20 P. M., Quincy and Galena at 7 A. M. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Munice. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

8 A. M. MAIL TRAIN—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STEAMER FOR DETROIT; at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at DELAWARE with the C., C. and C. Road, for Cleveland and points East. Also connects with Junction Railroad at Hamilton for Oxford.

4:30 P. M. TRAIN—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Also, connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago. Also connects with Junction Railroad at Hamilton for Oxford.

6 P. M. TRAIN—For Dayton, Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 8 A. M.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; at the new Ticket Office on West side of Vine street, between the Post Office and the Burnet House; or at the Sixth Street Depot.

D. McLAREN, Superintendent.

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circular which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the retort is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry wet gas holder, holding 300 cubic feet,.....	\$300 00
do do do 400 ".....	335 00
do do do 500 ".....	375 00
do do do 600 ".....	450 00
do do do 700 ".....	525 00
do do do 800 ".....	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, as now in operation in several States, apply to

R. T. COVERDALE,

167 Walnut Street, Cincinnati, Ohio, who has the exclusive right to manufacture and sell in the State of Ohio.

Feb. 24th, 1859.

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APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Booksellers, Country merchants, and others to extensive stock of School, Classical, Theological, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the leading publishers, we are enabled to offer at the principal and lowest prices. We respectfully solicit a comparison of stock and prices with any other house in the West.

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Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, Envelope, Manilla, and Tea wrap-boards, Envelopes, Gold & steel pens, Penholders, Copying Presses, Pencils, Pen-stands, and Inkstands; Erasers, Wax, Bankers' cases, Book rests, Bill head boxes, Envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files; Date Calendars, together with all other articles used in the counting-house.

Stationers,

To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly pagged, including all sizes, from the small memorandum book to the large Super-Royal and Imperial bound in a great and of superior workmanship. Books made to order of any size, with or without printed headings, and warranted to give satisfaction in quality of paper, accuracy of ruling, and durability of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

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We are prepared to Print and Bind books in any style desired, at rates as low as quality of work cut in this where. Our executing these the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Dray receipts, Cards, Circulars, or other descriptions of printing, will find that we do such jobs despatch. Orders re-

Stereotype of any description that may be desired as the same can be executed by our branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Dray receipts, Cards, Circulars, or other descriptions of printing, will find that we do such jobs despatch. Orders re-

Publishers,

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, *Clocks' Compendium*, *Rollin's Ancient History*, *Plutarch's Lives*, *Josephus*, *Spectator*, *Chain of Sacred Wonders*, *Familiar Science*, *Webb's Monitor*, *Soden's German*, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, Books of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

Books of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

W. HARVEY'S SAFETY JOINT

For Coupling the Ends of "T" Rails.
PATENTED, NOV. 2, 1858.

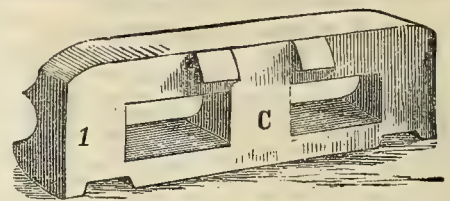


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

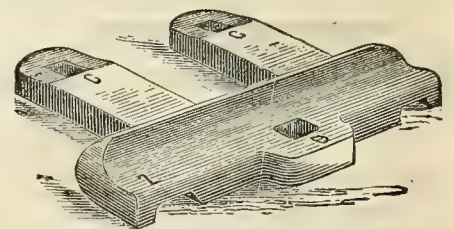
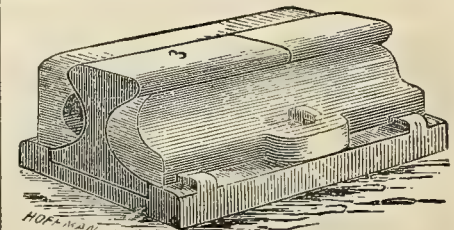


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that on one part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly free road, thereby doing away with the breaking of rails, wheels, and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear of the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
41 Jefferson-street, Albany, N. Y.
ON AGENT, Cincinnati O.

APPLEGATE & CO.,
Booksellers, Publishers, Stationers & Blank
Book Manufacturers,
43 Main St. Cincinnati, O.

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

SOLE IMPORTERS.
PROSSER'S PATENT SURFACE CONDENSERS for high pressure steam, with sea or other bad boiler water, gauges, 3 cutter drills, counter-sinks, tube end cutting bars, expanders, tube scalers, steel wire and whalebone brushes, pull lever wrenches, tubes—plain or enameled, screwed together for Artesian Wells, HOLLOW SLABS for various purposes, Steel for Boilers.
THOS. PROSSER & SON,
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d. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

BUSH & LOBDELL,
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MANUFACTURERS OF

CHILLED WHEELS

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TIRES.

For R. R. Cars & Locomotive Engines,
ARE PREPARED TO

Execute Promptly Orders to any Extent
FOR THEIR
CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE,
WITH OR WITHOUT AXLES.

WHEELS FITTED
To Hammered or Rolled Axles,
In the best manner, at the shortest notice, and on the
Most Reasonable Terms.

A Book for Every Business Man!
JUST PUBLISHED

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COMPILED BY E. PENROSE JONES,
Late Assistant Post-Master at Cincinnati.
Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.
U. S. BLANK AGENCY, CINCINNATI POST-OFFICE, {
January, 1859.

This work has been carefully compiled and corrected by E. PENROSE JONES, Esq., late Assistant Post-Master of the Cincinnati P. O., from the Records in this Department, and other sources, and contains the most complete list of Post-Offices especially of the Western, North-Western, and South-Western States, yet published.

MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an active pamphlet of about 100 pages. The entire matter is kept standing in type, and as the compiler is promptly advised of all New Offices, Changes and Regulations of the Department, the information is corrected up to the last day of publication, an advantage possessed by no other work of the kind.

OBSERVE, That this list is arranged by States and Counties, making it especially valuable to business men. No similar arrangement has been published since 1856. There are 3000 more offices in this than in any book heretofore issued. The Price is one-half that of any work of the kind now published.

If Single copies sent by mail (postage prepaid) to any address, upon receiving Twenty-five Cents in Silver or Postage Stamps. Five Copies sent for \$1.00, or Twelve Copies for \$2.00.

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WHEELER & WILSON'S



SEWING MACHINES.

W. M. SUMNER & CO., cor. Fourth and Wal
nut Streets, second floor, Cincinnati, Ohio,

BRANCH OFFICES:

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Lafayette, Ind., Dayton, O.,
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We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being ALIKE on both sides, impossible to ravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions, free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

Send or call for a circular, containing all particulars, prices, testimonials, etc.
WM. SUMNER & CO.
Feb 12.

1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th
Corby, Gossin & Co.'s make, for sale very
low by
TRABER & AUBERRY,
7 Public Landing

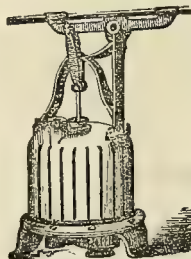
GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND
Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and in all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.
SILVER MEDAL. (The highest prize) awarded McGowan's Compound Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855.—1

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co., Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase
Ag 4, m. 6.

FREEDOM IRON COMPANY,

MANUFACTURERS OF

LOCOMOTIVE TYRE,
Engine and Car Axles, Pump and Piston Rods,
Bar of all Sizes,
And all Forgings for Railroad Machinery.

Lewistown, Milford Co., Penn.

JOHN A. WRIGHT, Sup't.

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, Hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works. June 9.

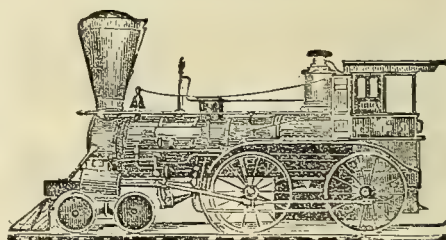
New Time Table

OF THE

NEW YORK CENTRAL R. R.

	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp.	7.00 A. M.	7.00 P. M.	7.00 P. M.
Mail	9.00 A. M.	12.50 A. M.	
New York Exp.	11.15 A. M.	9.00 P. M.	9.00 P. M.
Night Exp.	5.00 P. M.	4.00 A. M.	4.00 A. M.
Utica Accom'd.	6.00 P. M.	Ar. U. 10.00 P. M.	
N. Y. Mail	11.15 P. M.	10.00 A. M.	10.00 A. M.
	Leave Buffalo.	Leave Bridge.	Ar. Albany.
New York Exp.	5.15 A. M.	5.15 A. M.	3.30 P. M.
Steamboat Exp.	8.30 A. M.	8.00 A. M.	8.00 P. M.
Mail			2.30 P. M.
Cleveland Exp.	6.00 P. M.	6.00 P. M.	4.30 A. M.
Cincinnati Exp.	11.00 P. M.	11.00 P. M.	8.30 A. M.
Utica Accom'd.			10.00 A. M.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.
ap. 20
MOORE & RICHARDSON.

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DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of **COL. E. W. MORGAN**, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

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Schools of Architecture, Engineering, Commerce, Medicine, and Law, admit of selecting studies to suit time means, and object of Professional preparation, both before and after graduating.

The twelfth annual term is now open. Charges, \$102 per half-yearly session, payable in advance.

Address the Superintendent, at "Military Institute, Franklin Springs, Ky.," or the undersigned.

P. DODLEY,
President of the Board,
Jan 5th.

The Railroad Record.

E. D. MANSFIELD,
T. WRIGHTSON. } Editors.

CINCINNATI:
Thursday Morning, Nov. 10, 1859.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
OFFICE—No. 167 Walnut Street.

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To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

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One square, single insertion,.....	\$1 00
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“ “ six months,.....	12 00
“ “ per annum,.....	20 00
“ column, single insertion,.....	5 00
“ “ per month,.....	10 00
“ “ six months,.....	40 00
“ “ per annum,.....	80 00
“ page, single insertion,.....	15 00
“ “ per month,.....	25 00
“ “ six months,.....	110 00
“ “ per annum,.....	200 00

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THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

The Washington County, Texas, Railroad Company need \$75,000 of active available means to accomplish their present designs. The Treasurer reports the value of property and assets of the company to be \$421,467 35; total liabilities, \$112,368 71; balance in favor of the company, \$309,098 58.

ST. NICHOLAS HOTEL,
NEW YORK, Nov. 2, 1859.

SIR: In reply to your enquiries, I have to state, all non-paying stockholders and non-complying with "new policy" of 12th April last, are cut off as "dead weight." No stock issued before the 12th April can be safely bought, unless accompanied with evidence of compliance of an accredited agent of the company.

Messrs. Creiglin, Tate and Conwell, agents, chosen by Cincinnati stockholders, have paid nothing to me or the Company; and I am not now at liberty to receive from them or stockholders loans upon stock; but I am now, by stockholders who have paid, urged not to do so. The losses of your stockholders is no fault of mine. I faithfully urged them to act with us, and be protected by the exertions I was then making for the Company. All stockholders who have paid me, or agents appointed by me, can have their stock recorded and reissued at the Marshall office. The causes hitherto delaying a reissue, no longer exist. Buy no stock without its date be subsequent to 12th of April, 1859, and with the word "Recorded" written across the face of certificate, and signed "D. C. Wilder, Secretary."

I hope soon to have J. Edgar Thomson at the head of this Company, and our stock ten dollars per share, new issue.

Very respectfully,
J. FOWLKES,
President S. P. R. R. Co.

THE RAILROAD SYSTEM.

THE LONG LINES AND AXIAL LINES.

In surveying the Railroad System of the United States, it is quite curious to see how (although unintentionally, and without the possibility of a general law, the National Government having refused to enter upon a system of Internal Improvements,) how, we say, the general aggregate has fallen into a system, and a good one. There were originally hundreds of Railroad Charters granted, and with the exception of the N. Y. & Erie, and Baltimore & Ohio, nearly all of them short lines. If left in this State, there could be no system, and we may add, no economy. The N. Y. Central, for example, is composed of seven different pieces, continued, at different times, and running under different managements. The same was the case, over nearly the whole union. But, it soon became evident, that it was the policy of all the early roads, as far as possible, to consolidate with each other, and then to continue their lines, and thus to combine, in a common interest, roads stretching over the whole country; and such will be the policy hereafter, till the whole country is intersected with grand axial lines. To these, there run others, from the interior country, which are like the creeks to the rivers—tributaries carrying to the great lines, and thence to the great marts of commerce, the surplus produce of the country. It will be interesting to look, at the whole result, as connected in a system, and we propose to do this, under three heads: 1st. The Long or Axial lines. 2d. The centers of Railroads, or great marts of commerce; and, thirdly, the tributaries to the great lines.

1. THE AXIAL LINES.—The first and longest of these may be called the NORTHERN AXIAL, which commences in Maine and terminates in Iowa. Its main links are as follows:

Bangor to Portland.....	137 miles.
Portland to Boston.....	167 "
Boston to Albany.....	200 "
Albany to Buffalo.....	298 "
Buffalo to Erie.....	82 "
Erie to Cleveland.....	95 "
Cleveland to Toledo.....	112 "
Toledo to Chicago.....	243 "
Chicago to Dubuque.....	178 "
Dubuque to Cedar Falls.....	111 "

Aggregate..... 1,579 "

This line, which extends to the center of Iowa, and nearly to the Eastern boundary of the United States will, no doubt, soon be extended to New Brunswick on one hand, and to Nebraska on the other, embracing in one continuous East and West line—2,000 miles of Railroad. This line, which is of so great extent, and has cost at least \$100,000,000, is one which must ever enjoy peculiar advantages. In the first place it is on the main line of emigration, from the country which sends out people, to the country which receives them. New England and New York have long been the region which furnished the greatest number of emigrants; while to increase this column, the lines from New York

city (the great reservoir of foreign emigrants,) converge on the Northern line at Buffalo. Thus the passenger traffic, on the Northern Axial line is, and must be, very great. Again, this Axial skirts the shores of the Lakes, which are frozen four months in a year, thus giving the road the immense amount of winter transportation of produce. It is also evident, that on this Lake line must converge all the short lines, which run from the interior to the Lake ports. For these and other reasons, this axis will always be one of great traffic and movement.

2. The next great axis may be called the CITY CENTRAL AXIAL. Commencing at Boston, it passes through New York, Philadelphia, Baltimore, Cincinnati, and St. Louis; thus connecting the five largest cities of the Union. It begins in Massachusetts and ends in Missouri. It is constituted as follows, viz:

Boston to New York.....	234 miles.
New York to Philadelphia.....	87 "
Philadelphia to Baltimore.....	98 "
Baltimore to Cincinnati.....	584 "
Cincinnati to St. Louis.....	340 "
St. Louis to Jefferson City.....	125 "
Jefferson to Tipton.....	38 "

Aggregate..... 1,506 "

This line, it will be observed, is very large—ly on the River Axis of the United States. It first enters the Valley of the Potomac; then crosses the mountains into the Ohio Valley; then into the Valley of the Missouri—making full eight hundred miles of the whole distance. The cities and towns on its route comprise more than 2,000,000 of inhabitants. In this respect the city axis has much the advantage over the Northern. Another great advantage is that of passing through the mineral region. Full five hundred miles of this whole route are through deposits of iron, coal and salt. These are yet but little developed; but, as capital, and population increase, the carriage of these articles to the manufacturing towns will also increase, till this branch of business alone will exceed all the traffic of the northern routes.

3. The third great line may be called the SOUTHERN AXIAL LINE, commencing at Washington City and proceeding to Texas. It is composed as follows, viz:

Alexandria to Richmond.....	130 miles.
Richmond to Raleigh.....	183 "
Raleigh to Charlotte.....	175 "
Charlotte to Columbia.....	119 "
Columbia to Augusta.....	145 "
Augusta to Millen.....	53 "
Millen to Macon.....	112 "
Macon to Atlanta.....	101 "
Atlanta to West Point.....	87 "
West Point to Montgomery.....	78 "
Montgomery to Mobile (a).....	180 "
Mobile to N. Orleans (b).....	150 "
New Orleans to Broshen.....	88 "
To Texas (c).....	160 "
Texas Pacific.....	20 "

Aggregate..... 1,781 "

Of this line, the limbs marked (a), (b), (c), are unfinished; so that the finished line makes a little short of 1,300 miles. South of Virginia this line is largely engaged in freighting cotton to market, and for a long time must make this its chief business.

4. The SOUTH-WESTERN AXIAL. This be-

gins on the waters of the Atlantic, at Richmond; and proceeds South-west to Memphis. It will become by far the most valuable line in the Southern States. It is composed, as follows:

Richmond to Lynchburg.....	124 miles.
Lynchburg to Knoxville.....	334 "
Knoxville to Chattanooga.....	148 "
Chattanooga to Memphis.....	309 "
Aggregate.....	915 "

This is not so long as the others; but is quite as important. It pursues, in its general course, the direction of the Alleghany mountain, and will draw to it an immense interior traffic.

We have now reviewed the four great axial lines, between the East and the West. They constitute, in themselves, nearly 6,000 miles; and when the few links wanting are completed, they will make at least 7,000 miles. We may also consider it certain, that they will be extended to the Pacific Ocean; the Southern, and South-western, by way of the Texas Pacific, and the North and Central by the Missouri Pacific.

THE KIDNAPPING CASE AT COLUMBUS.—The *Columbus Journal* has received the following communication from the officers of the Little Miami Railroad, showing that there is no disposition on their part to make the kidnapping business a feature of their road.

OFFICE OF COLUM. & XENIA R. R. Co.,
COLUMBUS, O., NOV. 3, 1859. }

Editor of the State Journal:

DEAR SIR:—Owing to the remarks in your paper of yesterday morning, in relation to the taking and kidnapping of a negro, from the Columbus Depot, I directed the Superintendent to investigate and report to me the facts in the case. That report I received this morning, and herewith enclose it to you for publication.

Yours, very respectfully,
W. B. HUBBARD, *Pres't.*

COLUMBUS, NOV. 2, 1859.

W. B. Hubbard, *Esq., President:*

DEAR SIR:—I have investigated "the late kidnapping case," as reported in the *Ohio State Journal* of this morning, so far as the agents and employés of the L. M. & C. & X. R. R. are alleged to have been implicated, and I find that on the morning of Friday last, the No. 1 Express train which should have left at 8:55 A. M., was detained to secure the connection with the train from Pittsburgh via Steubenville, which was late, and not "until the kidnappers succeeded in overcoming their victim and getting him in the cars." The deputy marshal and negro may have been secreted in one of the saloons before reaching Xenia, and there was no room in the cars to lock them up in, nor did the Conductor aid them in any manner.

The train, although behind time, stopped at Xenia, as usual, to take wood and water, and to transact current business, and in fact was detained there the full time allowed by card.

Please ask the *Journal* to place the road in its true position in this affair.

Truly, yours,
J. DURAND, *Superintendent.*

MISSISSIPPI AND TENNESSEE R. R.

PRESIDENT'S REPORT.

At the date of your last annual meeting, you had fifty-nine miles of operative road—contracts for the graduation of twelve additional miles had been let out. The twelve miles are now about completed, with the iron laid thereon, making seventy-one miles of operative road for the present cotton season. In addition to this we expect to have eight additional miles of track laid during the month of December next, to the town of Oakland, making seventy-nine miles of operative road, from the first of January next.

This will leave twenty miles, and a fraction over, of our road yet untouched, before we get to its terminus, Grenada.

The entire graduation, cross ties, and track laying of our road, from a point south of Yokkona river, where our old graduation contracts terminate, to Grenada, we have let out to Messrs. Strong and Pope, known to you all as reliable and responsible contractors. The entire work is to be completed according to the terms of the contract, by the first of March, 1861.

By advancing to them a loan of one hundred thousand dollars, in anticipation of work done by them, with which to buy slaves, adding thus to the large slave force they already owned, your Directory obtained from them terms of payment highly favorable, and which can be easily met out of the surplus earnings of the road. No money is to be paid them until the completion of the road, at which time ten per cent. on the amount that may be due them, deducting the one hundred thousand dollars advanced, and, thereafter, twenty per cent. every year until the debt is extinguished, the Company paying eight per cent. interest on the indebtedness. There is nothing then unprovided for as to the unfinished part of our road, except iron and bridging for twenty miles, and the additional equipment the road will require on its completion and consequent connection with the railroads to New Orleans.

As for bridging and equipment, we can safely rely upon the surplus receipts of the road.

To purchase iron we must rely upon the sale of the Income Bonds of the Company.

At your last annual meeting you authorized your Board of Directors to issue income bonds of the Company, for an amount not exceeding six hundred thousand dollars, to be due in ten years from the first of November, 1858, drawing seven per cent. interest per annum, secured by mortgage, etc. On account of our contract with Messrs. Strong & Pope, heretofore detailed, allowing long credits for graduation and superstructure payments, and other considerations, your Board thought it best to withhold from issuance and sale the income bonds authorized.

As the sale of some such bonds will be requisite to the completion of our road, and to prevent the Company from being jeopardized by a large floating debt, maturing too speedily for the resources of the Company, your Directory recommend a modification of the authority voted at your last annual meeting.

Instead of authority to issue an amount not exceeding six hundred thousand dollars, they recommend the authority be limited to three hundred thousand dollars.

They likewise recommend that authority be granted to pay ten per cent. interest instead of seven per cent. interest per annum; that they mature in ten years from the date of their issuance.

That a sinking fund of thirty thousand dollars a year be set aside out of the net earnings of the road for the purchase and payment of the bonds either before or at their maturity. This sinking fund to commence the first year after the completion of the road.

That the Company retain the privilege in the face of the bonds, severally, to pay them off before maturity.

Your Directory think that such bonds should sell at par, and the Company, by paying ten per cent. interest, which they are authorized by their charter to do, would save in the sacrifice of discount on the face of the bonds they would be obliged to make, were they to draw seven per cent. only.

On a road costing two millions of dollars, there are only six hundred thousand of first mortgage bonds, and two hundred thousand dollars of these being deposited with other securities with the State of Mississippi, as collateral security for the School Fund Loan, would leave only four hundred thousand dollars of first mortgage bonds on the market.

Nine hundred thousand of first mortgage and income bonds constituting a lien on one hundred miles of road costing two millions of dollars, productive of earnings as the past history shows this road will be, is surely not disproportionate, and has nothing in it that should deter capital from investment in the income bonds.

Of the four hundred thousand dollars of disposable first mortgage bonds of our Company, we have sold two hundred and fifty thousand dollars, leaving one hundred and fifty thousand dollars yet unsold.

These are deposited with certain South Carolina banks as collateral security for a loan of one hundred thousand dollars, which our Company advanced to Messrs. Strong & Pope, contractors, as heretofore detailed. We expect to pay this loan by the sale of the bonds.

By reference to our chief Engineer's report, you will see that since our last annual meeting, estimates to the amount of \$199,903 10 have been returned. This amount has been mainly expended on the work south of Panoa, and is to be added to our construction account.

Of this amount \$27,118 20 is for the purchase of iron, through the house of John Fraser & Co., of Charleston, S. C., on four and six months' credit.

We have likewise purchased two Freight Locomotives at the cost of \$18,600 00, to be paid for in six, nine and twelve months from the 10th of July last.

We have purchased on credit, two new passenger cars, one baggage car, and eleven box cars.

These credit purchases with one hundred thousand dollars borrowed of South Carolina banks, and advanced to Messrs. Strong & Pope, have enlarged our floating indebtedness, increasing it from \$170,622 99, the amount at date of our last report to \$319,518 06.

To meet this amount, we rely upon \$150,000 00 of first mortgage bonds unsold, \$118,782 98 of bills receivable and the coming season earnings of the road.

In future we will have no more money (except the per cent. heretofore mentioned,) to pay for graduation, cross ties, and track laying. Our earnings and other resources can be appropriated mainly to the liquidation of floating debt, and purchase of iron and equipment, and bridging, and paying interest of our funded and floating indebtedness.

For the details of the progress of the work on the road, I refer you to our Chief Engineer's report.

I likewise refer you to his report, and that of the Treasurer, for the items and aggregate of construction account up to date.

The discrepancy between the Chief Engineer's and Treasurer's report, arises from the fact that construction account was payable partly in the stock of the Company, and the same is embraced in the Engineer's report as cost of construction, whilst the Treasurer's report shows only cash payments actually made, and stock payments only as shown by final estimates.

The Engineer's report shows that general construction account stands chargeable up to date with the sum of \$1,493,936 09, and to this should be added discount of bonds sold by the Company. The general construction on the first of October last, amounted to \$1,223,732 59, showing an increase during the last corporate year of \$270,203 50, besides the addition to discount accounts on account of sale of first mortgage bonds, which amounts to \$26,072 61, making an aggregate increase in construction account of \$296,276 11.

In our last annual report we estimated the net receipts of our road over operative expenses at eighty thousand dollars, during the corporate year just ended. The result of the year's business, is much more favorable than our estimate.

By reference to the report of our Superintendent of Transportation, it will be seen that the gross receipts of the road amounted to one hundred and seventy-six thousand four hundred and sixty-two dollars and seventy-

nine cents, and the operative expenses sixty thousand twenty-nine dollars and forty-nine cents, leaving net \$116,433 30.

This amount, \$60,029 49, being entitled to a credit of \$1,800 00 per trucks made in our machine shop, for new passenger cars, would leave \$58,229 49 as the pure operative expenses of the road, showing the unprecedented low figure of thirty-three per cent. on gross receipts; and this, your Directory do not think, has been effected at the expense of either running stock or track. Both seem to be in good condition.

We have had the same length of operative road only this year that we had last.

Receipts for freight, passengers, and mail, per year 1858	\$161,001 49
Receipts for freight, passengers, and mail, per year 1859	176,462 74

Increase	\$15,461 30
Operative Expenses of year 1858	\$58,229 49
1859	61,163 16

Decrease	\$2,933 67
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Thus showing a considerable increase in receipts, whilst there was an actual decrease in operative expenses.

We owe these results mainly to the efforts, skill and economy of our Superintendent, M. W. Newell. As he has thought proper to send in his resignation and quit the service of the Company, for reasons outside of the discharge of his duties as Superintendent, your Directory deem it nothing but justice to him, to say they are perfectly satisfied with the manner he conducted his department on the road.

The gross receipts to each mile of road in 1858	\$2,728 84
1859	2,941 04

Increase	\$212 20
Operative expenses to each mile of road in 1858	\$1,036 66
1859	970 49

Decrease	\$66 17
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The net cost of construction and equipment of the fifty-nine miles of operative road that did the foregoing business, amounts to \$1,209,539 12, including discount on bonds. The above net earnings show nine and one-half per cent. on the actual cost and outfits of road.

They show likewise fourteen and one-half per cent. on the amount of capital stock paid in.

To add to the pure operative expenses of	\$58,329 49
Salaries of President, Treasurer, etc.	6,500 00
Office rent, stationery of Treasurer's office	800 00
Interest on funded and floating debt, exchange, etc.	43,852 98

Making in the aggregate	\$109,382 47
Which deducted from gross receipts	176,462 79

Leaves	\$67,080 32
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That has been paid on construction account during the past year, and which would give stockholders a stock dividend of eight and one-half per cent on every dollar of their stock.

Favorable as these figures show the business of our road, we think they will be doubled at least on its completion and consequent railway connection.

By reference to our Superintendent's report, you will see our receipts for 1858 and '59, are as follows:

	1858.	1859.
Passenger receipts	\$56,657 34	\$65,394 24
Mail	2,458 33	4,425 00
Freight	101,685 82	106,643 55
Total	\$161,001 49	176,462 79
		161,001 49
Increase		\$15,461 30

This increase is mainly in passenger and mail receipts.

The reason of there not being a correspondent increase in freight receipts, we attribute to the competition created by the extension of the Mississippi Central Road to Water Valley in Yallabusha county. In the year 1858, our road was so much further advanced South than the Mississippi Central, that it got a great portion of the Yallabusha freight business, which, in 1859, was done by that Road. The Superintendent's report showing the great falling off in the receipts of cotton during the months of February, March, April and May of the year 1859, compared with the same month in 1858, point significantly to the cause we have assigned. The extension of our road in Tallahatchie and Yallabusha counties this cotton season, will, to a great extent, restore our freight business to its former prosperous increase. We are still impressed with the importance of the branch road down the valleys of Tallahatchie and Yazoo rivers to Canton, Mississippi. This branch road is especially important to our Company, on account of it giving our road an uncontrolled connection with the New Orleans, Jackson, and Great Northern Railroad. By such connection, we would not be at the mercy of other roads, as to a through ticket and freight system. We hope the people of the valley who are more directly interested in this branch road, will awake to its importance. Whenever they say it *shall* be built, *it will be*; and your Directory feel zealously disposed to give it every aid in their power.

F. M. WHITE, Pres't.

[From the New York Tribune.]

THE PACIFIC RAILROAD.

We propose to consider at this time the political or National necessity and use for a Railroad from the Missouri to the Pacific.

1. The Federal Government is now paying some Twenty-five Millions per annum for Military service, mainly west of the Mississippi. Nearly half of this heavy bill is paid for Transportation in its various shapes—for the conveyance of Provisions, Munitions, &c., to the Army in Utah, and to the various posts scattered through the Indian country; for Horses, Mules and Wagons, required to facilitate the conveyance of soldiers, arms, munitions and baggage from post to post, &c., &c. Every regiment employed in the Indian country or on the Pacific costs the Treasury at least \$1,000 per man per annum, of which we estimate that nearly half would be saved by a Pacific Railroad. Certainly, the saving from this source could not fall short of Five Millions per annum.

2. But the efficacy, the power of an armed force, in the defence and protection of a vast empire, depends less on its numbers than on its mobility—on the facility with which it can be conveyed to the point at which it may at any time be wanted. For instance: our Government has now some Six or Eight Thousand

Regulars scattered over Nebraska, Kansas, New Mexico, Northern Texas, Utah, California, Oregon, and Washington. These Six or Eight Thousand are not as efficient as Two Thousand would be if it were in the power of the Government instantly to transfer that Two Thousand, by a mere order, to the point at which they might at any time be wanted. A Pacific Railroad would not, indeed, fully effect this; but it would go far toward it.

3. Suppose our little Army, now largely concentrated in Utah, were urgently needed to repel some sudden danger, whether on the Pacific or Atlantic coast: It would be a good three months' work to provide the needful animals and remove that force to either seaboard. But, with a Pacific Railroad, the whole might be in New York, Charleston, New Orleans, or San Francisco, within a fortnight after the order was dispatched by telegraph from the War Department at Washington. The value of this facility of movement can hardly be overestimated.

4. At present, the regiments employed on the Pacific are almost or quite wholly raised and recruited in the Atlantic States. Their removal thence to their destination costs largely, heavily, in direct expense, and in that time which is money. Suppose a regiment to cost Half a Million per annum, and that six months are now consumed in sending it from Baltimore to Puget Sound, while one month would suffice with a Pacific Railroad: In addition to the saving on the present cost of its transportation, the saving in the time of that regiment would be \$200,000 directly, and practically much more; as part of the cost of recruiting, drilling, &c., now lost in the tedious transportation, would be saved by the accelerated movement.

5. In case of a war with any great maritime power, in the absence of a Pacific Railroad, we should be compelled either to surrender the Pacific States to subjugation and spoliation or maintain a double armament at enormous cost. Our army on this side of the Rocky Mountains would be utterly ineffective as against an expedition launched against the Pacific coast, and *vice versa*. But, with a Pacific Railroad, and the Telegraph which would inevitably accompany it, it would be morally impossible that an expedition directed against either seaboard should not be anticipated in its arrival by the concentration to oppose its landing of our soldiers drawn from every part of the country. Our Government, in aiding the construction of such Road, would inevitably stipulate for its use—exclusive, if required—in times of public peril, and would thus be enabled to transfer fifty thousand men from either coast to the other in the course of twenty or thirty days.

6. We have already expended some scores of millions of dollars on Fortifications, and are urgently required to expend as many more. Especially on the Pacific is their construction pressingly demanded. We do not decide how fast nor how far this demand may or should be responded to; but we do say that a Pacific Railroad, whereby the riflemen of mountains could be brought to the Pacific within three days, and those of the Missouri within ten, would afford more security to San Francisco than ever so many gigantic and costly fortifications.

But enough on this head.

—The social, moral, and intellectual blessings of a Pacific Railroad can hardly be glanced at within the limits of an article. Suffice it for the present that we merely suggest them.

1. Our Mails are now carried to and from California by steamships, via Panama, in twenty to thirty days, starting once a fortnight.

The average time of transit from writers throughout the Atlantic States to their correspondents on the Pacific exceeds thirty days. With a Pacific Railroad, this would be reduced to ten; for the letters written in Illinois or Michigan would reach their destinations in the Mining Counties of California quicker than letters sent from New York or Philadelphia, would reach San Francisco. With a daily mail by railroad from each of our Atlantic cities to and from California, it is hardly possible that the amount of both letters and printed matter transmitted, and consequently of postage, should not be speedily quadrupled.

2. The first need of California to-day is a large influx of intelligent, capable, virtuous Women. With a Railroad to the Pacific, avoiding the miseries and perils of six thousand miles of ocean transportation, and making the transit a pleasant and interesting overland journey of ten days, at a reduced cost, we can not doubt that the migration of this class would be immensely accelerated and increased. With wages for all kinds of women's work at least thrice as high on the Pacific as in this quarter, and with larger opportunities for honorable and fit settlement in life, we can not doubt that tens of thousands would annually cross the Plains, to the signal benefit of California and of the whole country, as well as the improvement of their own fortunes and the profit of the Railroad.

3. Thousands now staying in California expecting to "go home" so soon as they shall have somewhat improved their circumstances, would send or come for their families and settle on the Pacific for life, if a Railroad were opened. Tens of thousands who have been to California and come back, unwilling either to live away from their families or to expose them to the present hardships of migration thither, would return with all they have, prepared to spend their remaining days in the Land of Gold, if there were a Pacific Railroad.

4. Education is the vital want of California, second to its need of true Women. School-books, and all the material of Education, are now scarce and dear there. Almost all books sell there twice as high as here, and many of the best are scarcely attainable at any rate. With the Pacific Railroad, all this would be changed for the better. The proportion of school houses to grog shops would rapidly increase. All the elements of moral and religious melioration would be multiplied. Tens of thousands of our best citizens would visit the Pacific coast, receiving novel ideas and impressions, to their own profit and that of the people thus visited. Civilization, intelligence, refinement, on both sides of the Mountains—still more, in the Great Basin inclosed by them—would receive a new and immense impulse, and the Union would acquire a greater accession of strength, power, endurance, and true glory, than it would from the acquisition of the whole continent down to Cape Horn.

Fellow-citizens! let us have the Pacific Road, and not leave the glory of its construction to our grand-children!

We will consider the ways and means in another and concluding article.

SOUTHERN PACIFIC RAILROAD.—A meeting of the stockholders of the Southern Pacific R. R. has been called by President FOWLKES, at Louisville, for the 24th inst. A general attendance of the stockholders is requested, as business of importance is to be transacted.

The Manchester and Lawrence Railroad Co. have declared a dividend of 4 per cent., in stock, payable November first.

[From Hunt's Merchants' Magazine.]

CANALS AND RAILWAYS OF N. Y.

The situation of the Erie and other canals of the State of New York, with only four to five feet of water on the "long level," during the last summer, with the petition of canal forwarders to the Canal Board, in August, to fix the maximum loading of boats not to exceed four-and-a-half feet of water; and this, too, after twenty-four years of time, and the expenditures, under various pretences and false estimates, of upwards of fifty millions of dollars, by reckless politicians and profligate employees, the present State indebtedness, with the necessity for direct and continued taxation, to sustain the credit of the State, is truly "food for reflection."

Is it not time, under the difficulty of getting and maintaining even six feet of water on the level between Utica and Syracuse, to pause? and to use the language of M. B. Brockway, in the *Merchants' Magazine* for August, where he says:—"It is certainly high time that the State paused in its career of borrowing and expenditure. Let us take soundings, and see what can be done with six feet of water. Should the tonnage and revenues of the State canals not be greater in 1859 than they were in 1858," [to 1st September, 1859, as compared with the same period 1858, they had fallen off \$302,000,] "it may be regarded as quite certain that they never will be larger than at present; and if there is to be no increase, can there be any good reason offered for expending more money on them?"

We will add, particularly when we find the extra spring and summer rains this season has given us only five feet of water, (by order of the Canal Board,) that with this draught a boat has passed from Rochester to tide with 213 tons and the Strabo canal boat from Oswego to the Hudson with 119,600 feet of green pine lumber, equal to 209 tons. This fact, with the doubts now expressed by many—and we fear with truth—that there are not sufficient feeders, on the "long level," to supply and maintain seven feet of water, under the bad plan to get this depth of water, to-wit, by putting in a lift lock at Utica of three feet, to thus raise the banks to obtain seven feet of water with extra pressure, leakage, and evaporation, should make us pause in our expenditures until we have the responsibility of a professional report on this subject from the Canal Board.

The present increased rate of tonnage carried by the improved lake boat with five feet of water has, during the last summer, caused the laying up of a large portion of the boats on the canal for the want of employment. At Buffalo and Oswego may have been seen acres of boats tied up and unemployed, with the capacity of quadrupling the business on the Erie and other canals—and this, too, with five feet, and even less, of water, a part of the time. With six feet, it is contended by many, and among them the most intelligent forwarders, that we shall have better and more manageable boats, less liable to injure themselves by bunking each other and the locks, than with a seven feet canal, if there is any prospect from past experience of the present generation getting that depth of water under any expenditure and taxation, so long as "the more speedy enlargement and the saving of the canals" is to be the hobby on which politicians are to ride into power, and State indebtedness is wanted to extend our banking capital, the whole to be paid at a future day by direct taxation, unless the people, like the example we have had in other States, are

forced to the bitter pill of repudiation of their bonds.

We make these plain remarks, as it is now more than twenty-four years (1835) since the law was passed to enlarge the Erie Canal to any size *that could be paid for by its earnings*; when half the Canal Board, the sane part, were for making it six feet by sixty feet, and the insane part (no doubt acting on the resolutions passed at Rochester at the time, "*to make it the wider and the deeper the better*,") reported in favor of eight feet by eighty feet. They then, like referees and jurors, "split the difference," and then continued to expend money, without any scientific experiments to ascertain what a boat drawing five feet, five feet six inches, and five feet nine inches would carry, or the sized boat that would be preferred by the practical forwarder, and that was required by the wants of commerce and agriculture in this State and the States to the west of us, particularly with the improvements yearly taking place in constructing our railroads and their motive power.

The fact appears to be lost sight of (at all events by our canal politicians and our forwarders—the latter, it is estimated, have fifteen millions of dollars invested in boats, horses, and warehouses, and *they* can not see) "*that time is money*." That in this State, as well as those to the south of us, and in the Canadas, all the valuable merchandise and tonnage is steadily leaving the canals to seek the railroads, without regard to the cost, or charge for transportation, which falls mainly on the consumer.

It is now "the nimble sixpence instead of the slow shilling." The sagacious dealer in the interior, particularly those with small capitals, to supply the *daily* wants of his customers, resort to the railway and the capital of his correspondent in New York, instead of taking up money from the banks to lay in four to six months' supply as formerly, losing interest. The active trader has goods fresh and fashionable, and at prices that will pay a profit on immediate sales. His neighbor must follow suit, and employ the railway instead of the canal and long credits; and thus is the change that is gradually taking place in the United States and Europe as to the mode of doing business. We admit canals may be useful for lumber and bulky articles, requiring slow transit.

The writer, as early as the 23rd of April, 1841, communicated to the Senate of New York, at the request of the President, Lieutenant-Governor Bradish, "*facts relative to railways judiciously constructed between desirable points*," and by him they were laid before that body and referred to Mr. Furman, of Brooklyn, Chairman of the Standing Committee on Railroads. The Senator adopted the "facts" collected in his report, "as containing valuable information relative to railways and canals," when, in common courtesy, his report should have been printed. Mr. W. Moseley, of Buffalo, the Chairman of the Standing Committee on Canals, offered the same, whereupon the writer withdrew it from the Senate. He had no interest, and never has had, in either railroads or canals, more than every citizen of the State. He tried then, as he has ever since, "*to do the State some service*," by imparting such information as he could collect from official documents at home and from abroad—to use them as early as 1837, to persuade New Yorkers that they wanted at least a railway from their commercial to their political capital, to be extended to both Lakes Erie and Ontario. This visionary project at that period was ridiculed, where now New Yorkers, in their folly, have *three* railroads on

the east side of, and parallel to, the North River, contending for the same business, and I may say a fourth, extending from Jersey City to Dunkirk on Lake Erie, with a branch to Buffalo—a good local project, but premature, and a rival to the Central line. In this competition, and to the disgrace of the railroad system, we have or will expend near forty millions of dollars on a line over mountains 1,780 feet high and 65 feet grade, to contend with a like investment on the New York Central line from Albany and Troy to Buffalo; and then, forsooth, the State engineers and the bears of Wall street hold up our railroads to ridicule, and as not being productive, and they, with the press, gives us long homilies of advice—in substance, how directors should manage their roads to play into the hands of the great State monopoly, the Erie Canal, as if the people, as a body, were not as much interested in *their* railways as in *their* canals.

It is some signification to find that Mr. Rockway, and even then the present State Auditor, Mr. Benton, have come to the conclusion "that canals can not compete with railways by their side, [for the people will pay for time,] unless the latter be subjected to canal tolls;" that is to say, that the latter should be taxed to sustain the *minor* improvement. The citizens of New York should not forget that the Victoria Iron Bridge over the St. Lawrence at Montreal, to connect Quebec, Portland, and Boston by the Grand Trunk and Great Western Railroads, with our and their wheat lands and fertile prairies, is to be finished the ensuing month of November. Further, New York must not lose sight of the fact that the Hoosic Tunnel is to shorten the distance and to reduce the grades and *cost of transportation* from Boston to our *Central Railroad*, and to our canals, some fifty per cent. as compared with the present Boston and Albany Railroad. It has enlisted the aid of the State of Massachusetts to complete this work in two to three years. This effected, and the Hudson and Harlem Railroads leased to, or consolidated with, the Central and Oswego and Syracuse Railroads, and a railway freight bridge completed at Albany, as it should be, it will be seen what the nimble sixpence will do, as compared with the slow shilling on the canals. Then the following "facts," with others, covering 125 pages, which Messrs. Bradish and Furman endeavored to bring before the Senate, April, 1841, will not be considered visionary and heterodox, to-wit, that time is money, and the people will pay for it, when we said, page 55:

"The old standards are destroyed, and the advantages of every pursuit or undertaking, whether moral or physical, are now measured by *economy of time*, which is the greatest necessity of the age, and that for which there is the most strife." * * * * *

"That it may be understood what we mean by being cheaper, in the saving of time, we make the following contrast, and which can be appealed to as true in fact."

By steam power on the ocean, it is cheaper on merchandise and fine goods, embracing nearly all that pay best for carrying, at £7 sterling per ton, than £2 10s. by vessels.

By steam power on river and railroad, it is cheaper on light merchandise at \$17 per ton per one hundred miles, than \$5 by vessels, as between New York and Philadelphia, business by the high rate being checked.

By steam power on railways, it is cheaper on merchandise at \$25 per 470 miles, than \$21 by river and canal, as between New York and Buffalo.

By steam power on railways, it is cheaper

on heavy merchandise at \$2½ per ton per 100 miles, than by \$2 by canal.

By steam power on railways, for passengers at \$4 per 100 miles, than by \$1 by stage coach.

By steam power on railways, for a passenger at 75 cents per 40 miles, than 12½ cents by steamboat, as between New York and New Brunswick.

By steam power on railways, for a passenger at \$1 50 per 150 miles, than *nothing* by steamboat, as between New York and Albany, for *business travel*.

By steam power on railways, to carry the mails at \$500 per mile per annum, than at nothing by stages on all main routes.

"This shows an inversion of the usual order of things, in the higher being the cheaper rate, and is a practical illustration of the immense but imperceptible saving of time. Thus the comparison—the stage coach, sailing vessel, and canal boat on the *positive*; the steam ship, the *comparative*, and the railway, the *superlative* of cheapness as a general rule. Some would except coal from this rule, but they are mistaken, the canal closing at the moment of greatest need. A railway, which, besides obviating these difficulties, brings other advantages, must get the ascendancy."

"How many, unmindful of the fact, that the inventive character and spirit of the age is ever treading on the heels of the last improvement, and superceding on the morrow that which yesterday was thought perfect, still hold to their first impressions, and are unwilling to believe that they can have become so soon obsolete! Error, propagated *under authority*, (the *Canal Board*.) is the more to be lamented, as it becomes so hard afterwards to eradicate. This has often occurred in the controversies between canals and railways.

"Thus we go back only five years when locomotives and railroads were yet in their cradles, and we find the following information reported to the Legislature of New York, by the State Engineers in 1835—Assembly document, number 296, and which will contrast oddly with the facts of the present day. They say, '*that experience has so far settled the cost of transportation on a level railroad at 3½ cents per ton per mile, and an engine of 6½ tons could only draw on a level a gross load of 75.25 tons; on a 10 foot grade, or ascent, per mile, 49.53 tons; on a 20 foot grade, or ascent, per mile, 37.35 tons; on a 30 foot grade, or ascent, per mile, 27.24 tons.*'

"It is evident that these engineers rather inclined to the canal interest, for it is proved that all the time their report was being made, engines even then had drawn treble the amount allowed by them; and since, we know that they have drawn on a level near 500 tons gross, and 250 tons over a 40 foot grade.

"It was on such information as the above that the enlargement of the Erie and the construction of the Genesee Valley and Black River Canals were undertaken. And now that the first project is beginning to be thought ill-advised, its champions would seek to justify it by stating that the present canal is only equal to 25,000 lockages, when it is clearly proved that it is equal to at least 55,000 lockages, while it is becoming annually relieved of the more bulky tonnage—the destruction of the forest is not applied by the tonnage on its clearing up of the same derived from agriculture." (Now mark for 1840.) "Very few people are aware that a railway could be constructed from Buffalo to Albany, with a descending grade all the way, which would enable it to carry, at a cost of only one-half a cent per ton per mile, with ample business, and

thereby, with profit, admit of a reduction of 25 per cent. on the down freight, and 50 per cent. on the upward freight per Erie Canal, taking the rates of 1840 as a standard, which average \$9 per ton for the downward, and \$25 for the upward freight on merchandise for the year. If only, therefore, about one-third of the sum proposed to be *wasted* in the enlargement of the Erie Canal were applied to the completing such a railway, it would be in consonance with the lights of the age, and of true economy, and a most judicious investment. The railroads, now parallel with the Erie Canal, are gradually forming a continuous line from Albany to Buffalo, and to Oswego, and will, ere long, insist on being *unshakled* as to the carriage of freight; and the New York and Erie Railroad, in the course of construction, will also have become a participator of the *more lucrative* freight of the lakes, at a point more convenient than Buffalo. (Buffalo has since made a branch to the Erie Railroad.)

"And surely, the day will come, when Pennsylvania will have an avenue (she now, 1859, has it in her Central Railroad, to whom the State was glad to sell her ill and politically managed line of canals) to her metropolis, from Cleveland and Pittsburg, preferable points to them all. Nothing of this, however, seems to serve as a warning to the enlargement advocates; but politics, together with stock and contract jobbing, which have already ruined Pennsylvania, seems to have more sway over them than the true interests of the State of New York." * * *

Again, page 79:—"The construction of the New York and Albany Railroad, fifteen to twenty miles from the Hudson River, and running parallel with it, is about to be undertaken in earnest. That railways should pretend to contend with canals for freight, although that were considered presumptuous enough, was not so much wondered at; but that they should offer to compete, in any way, with the mighty Hudson, is generally considered in New York as truly chimerical. Greater wonders than this, however, have been realized." * * *

"It is shown in note xi., page 48, that in the south, rivers using steam are being deserted for the railway. In one sense, for the freight from and to New York and Albany, during the season of navigation, it is not pretended that the railway would attempt to compete with the river in rates of transportation; but in other senses, sufficient to warrant the work, it can do so effectually, and its advocates (the writer, as one, and for near seven years, never calculated on three roads being built at an expense of above twenty-five millions of dollars, when one-third of this sum would have built the New York and Albany Railroad, with but little cost for the *right of way*, instead of paying, as the Hudson River Railroad Company has done, one-and-a-half millions of dollars for this right and damages, having located their road by charter, 'on the margin of the river,' instead of taking the charter now owned by the Harlem Railroad Company, which gave the privilege of either the river or interior route, with any number of branches east) are fully justified in urging both its importance and profitableness upon the community."

"The following is a summary of ten reasons urged by its advocates in its favor"—(See report of the Common Council of the City of New York for 1840, on this subject, document 10:)—

1st. Authentic statistics show that apart from the river, on the line of this road, through

the interior of Putnam and Dutchess counties, the tonnage now got to market, at a great expense, is above 100,000 tons. It will be quadrupled.

2d. That the summer travel, and for eight months in 1839, was 3,500 per day, exclusive of sloops and market boats, or equal to through passengers, each way, one thousand per day between Albany and New York.

10th. *As the main stem* to the northern railroads, the saving and commerce of the winter travel would be immense; and who, in looking ahead three years, in which time the New York and Albany Railroad could be put in operation, would say it could then want for profitable occupation?

"Looking upon the New York and Albany Railroad, and its extension to Buffalo, and the New York and Erie Railroad to Dunkirk, as works adding to the useful and beneficial links in the great chain of the Union, a mixed physical and moral bond to it, they have our hearty advocacy; and in framing these notes, in respect to them, we have endeavored to make them unanswerable commentaries on the superior cheapness and more general utility of the railroad system itself, to which, in due time, the most skeptical will yield. The subject, indeed, is worthy the special investigation of the Legislature, by a committee, as we have before alluded to. And as the country is generally now making its observations for a fresh departure, it would be well not to start unprovided with correct views on the important item of internal improvements, which will be found almost indispensable among the other means necessary to preserve it in a true and steady course for the future." * * *

Page 92:—"It comes to us, then, that the railway, in most cases, can carry merchandise at or under the cost of freight on a canal, and is as cheap on all river and bay navigation using steam—time considered; and that, therefore, any charge for toll by canal would be only an additional bounty in favor of the trade seeking the railway, which, besides, never suspends its operations, and has a greater dispatch and certainty of arrival than either of the others." (The canal advocates refused to hear and print this doctrine, April, 1841, when it was published in the New York Railroad Office, by giving the copyright.)

We have extended these remarks beyond what we first intended. We wished to show, from facts and from experience in Europe and in this country, that the march of railways "is upward and onward," the motto in the coat of arms of New York. Not so, we regret to say, with her canals, and the several canals in the different States in this Union, as we may take another opportunity to show in their decadence, and in their history show the utter folly of any statesman to depend on canals to regulate and draw to the city of New York the great interior commerce of the West, either by steam or horse power, even if employed on a seven foot canal, or, if you please, on a river from the lakes to the Hudson, in latitude 42°; that is, obstructed by ice nearly half the year, and when, too, the people have determined to do their business—that is to say, the most valuable and paying part of it—*every day in the year*. This they will continue to do, all to the contrary that political canal conventions and mousing politicians may say, to buy votes, by fat and corrupt jobs on the "more speedy enlargement," with the practical result, that last summer they had only four to four and a half feet of water for a long period, and the forwarders now ask, in utter despair, the Canal Board to give them a uniform depth of four and a half feet and they will be content. The

State or politicians are not competent to manage canals. This is the experience of Pennsylvania, Ohio, and other States.

J. E. B.

[Correspondence of the New York Times.]

EUROPEAN RAILWAYS.

PARIS, Friday Sept. 23.

After an extended trip over the British and Continental railways, in first and second class carriages, by day and by night, in rain and sunshine, with regular trains and by crowded specials, and with the express purpose of studying the advantages and defects of the European system, I am impressed with these conclusions:

First—That a far higher standard of passenger comfort may be obtained in both countries, with a positive decrease of ultimate cost to railway companies by copying special features in one another's systems.

Second—That luxurious carriages and fast trains, somewhat on the European plan, might be at once attached to American lines, for invalids, parties, and the many people, who, from necessity or choice, would gladly pay for riding in them, to the immediate pecuniary advantage of the companies themselves.

Third—That various entirely new conveniences might be added to all sorts of carriages, without much cost, and greatly to the amelioration of railway travel.

In briefly explaining myself as to the above propositions, I will not now allude to an improved road-bed and superstructure, which is, after all, one of the chief features of English railway comfort as well as economy, but to the carriages, the stations and attendance, and the baggage system.

In comparing first class English and American cars, it will not be fair to shirk the question of comfort because English first class fares are four cents a mile, while ours are only two cents, for it must be remembered that Englishmen have saddled themselves with these fares by charging railway companies \$7,500 a mile for "Parliamentary expense," and \$43,000 a mile (a sum which alone would have built each mile of road in America) land damages, and thereby compelling them to charge high fares, in order to pay a small interest on tremendous capital augmented thus, and in many other ways practically unknown to us,—augmented *not by the cost of way and equipment*, but of matters which on the average hardly effect American roads at all. We must further remember that special comforts can be regularly and universally enjoyed in Europe by paying for them, while in the States they can not be so had for love nor money.

It will be necessary, not to prove, but merely to remind your readers, that the substance of railway carriage comfort consists in two things, to wit: *ventilation and upholstery*. Without pure air, neither beds nor cushions will prevent headache and nervous irritability, and without plenty of soft head and elbow rests, in addition to a wide springy seat, a comfortable night ride is impossible, especially over rough American roads.

English first class carriages are better than our own in ventilation, and vastly superior in upholstery. Their division into compartments does not necessarily affect either of these questions.—English carriages have a sliding ventilator over each window, to which might be added a cheap, excellent, and seldom used, American deflector for changing the current of air as desired: they have windows which open easily down, not up, introducing in cool weather a regulated supply of air—not in the

face and breast, but over the head, where it is wanted; these windows are lifted and fastened with a strap, like a coach window, and are always adjustable. American cars have a much smaller area of top ventilation per passenger; the windows open the wrong way for comfort, or, rather in most cases, with their wretched brass finger traps and sticky partitions, they either do not open or do not shut at all.—There are American windows which answer every purpose, but we now speak of the average practice. With regard to warming we start on a wrong principle, viz: plenty of heat irrespective of ventilation; but the reverse and true principle is embodied in Europe, where plenty of artificial heat is applied to feet by hot water tanks in the floor, while the body is protected by clothing, as required, and above all, by a fresh supply of oxygen to support the combustion within. Compare this with a full American car in a winter night, hot and cold by turns, and always foul. The outside temperature being the same, the one carriage invites us to refreshing sleep, the other poisons us into drowsiness which is neither sleep nor rest. Are American winters colder than English winters? Then we must simply apply more heat in the European way. A difference in isothermal lines does not oblige us to crack our heads and freeze our feet in badly warmed and ventilated cars.

But the upholstery of English carriages means something more than a cover for a board. It was designed to be a soft medium between the destructible body of man and the hard substance of his tabernacle. But should the antiquarian of 2859 stumble upon an American car of 1859, the lore of a thousand years would not enable him to imagine that any similar design had entered into the hearts of the constructors thereof. As his head should grind against the multangular window frame of that ancient car, and his shins should scrape athwart the low cross piece before him, verily he would remember the days of the Inquisition, and thank his stars that he lived not a barbarous age. * * * * *

One little carriage convenience met abroad is at least worth mentioning; it is a rack overhead, for packages, umbrellas, books, &c., not a couple of rods, through which anything smaller than trunk will slip down upon your head; but a net of cords, visibly constructed for a specific purpose, and not at random. * * *

In England a given size of car carries an average of 21 first class passengers, at 4-14 cents a mile, or 32 second class at 2-88 cents, or 32 (or more if occasion requires) third class at 1-66 cents per mile. The first class accommodations are splendid upholstery, good ventilation, plenty of room, and in many cases a higher rate of speed than that of second class cars. The second class accommodations are, slightly less room than is afforded in ordinary American cars, good ventilation, and rather limited upholstery. For short distances they are sufficiently comfortable for gentlemen in good health, and are largely patronized by first class people. Third class fare buys merely decent transportation. If there is a crowd, passengers must sit uncomfortably close. There is no upholstery, but the ventilation is generally uninterrupted, since many third class cars are merely a box, with a cover supported on small posts. Third class passengers are never sent by express trains. Thus the comfort and speed of transportation is in proportion, not to any fictitious standard of equality, but to the only standard in other commercial matters—what a man can afford.

A very great improvement in this direction would be a large variation of fare with refer-

ence to speed. With Americans, time saved is of greater commercial importance than sleep and comfort. The especial value of the system to railway owners would be that they could then more nearly approximate the charge for transportation to its actual cost, for speed is the chief modifier of railway expenses. If an average speed of thirty miles an hour is maintained by all passenger trains, and the remunerative fare is three cents a mile, it is likely that half the passengers would be content to go at eighteen miles and pay two cents, which would increase the company's revenue, for if the fare is low, the company can take its own time. On the contrary, a portion would be only too glad to pay five cents for a speed of forty miles, which would also increase the company's profits, for if the speed is satisfactory the company can charge its own price, and for the few fast passengers it can employ light locomotives, which make even high velocities as cheap as common American speeds with our ordinary rail-smashing engines.

The whole European practice, as well as common sense, teaches us that our railway profits may be increased and the public better accommodated by adapting railway carriages and speeds to its widely-varying wants. How shall this be practically accomplished? There is one very serious disadvantage in running trains composed wholly of long American cars—they are not once in fifty entirely filled. If one or two extra passengers can not get seats in the train, the company must attach a long car and carry around perhaps sixty empty seats and a dozen tons of non-paying load. A few shorts carriages, very likely on the exact European plan, would prevent this. Through passenger cars, which need not be visited by the conductor from one end of the road to the other, require no aisle or other convenience for standing or walking.

A vast saving could be made in England in the proportion of dead weight per passenger, by using the American plan of car for the bulk of the traffic. This plan is partially adopted in Germany.

The arrangement of the American car is for many purposes excellent, but we should reform our manner of building it, especially by the substitution of light and strong iron plates for clumsy wooden beams, which, in case of collision burst like bomb-shells into death-dealing splinters. And we should use wheels instead of rollers under our cars. The rolling friction decreases as the diameter of the wheel increases.

There are at least three classes of travelers: *First*—A few business men, to whom time is the primary, and comfort the secondary, consideration. For them a light British tank engine, at 40 miles an hour, with an American arrangement of seats, well upholstered and well filled, would hardly cost more per mile than an ordinary lumbering engine with a lumbering tender weighing more than all the passengers, and at least one unfilled lumbering car at half the speed. But the fare would be double.

Second—There would be a still larger class of pleasure travelers who would rather prefer thirty miles an hour, so they could enjoy pure air, elastic cushions, and plenty of room; and for them the best American system of artificially washed and cooled (or heated) air, a considerable increase of dead weight of car per passenger, to afford ample space, and the most expensive continental upholstery, would be found to yield a handsome per centage; for when a man can't complain, he will pay.

Third—Perhaps one half the passengers would be very glad to sit close, and move slowly, if the ordinary fares were considerably de-

creased. An American forty passenger car arranged to carry sixty, could be run at fifteen miles an hour, for half the cost per mile per passenger of working our ordinary trains, and hence would yield a larger income, for the fares would hardly be reduced one half, while the number of passengers would necessarily be increased. And in such a vehicle there is plenty of room for sixty people if they sit face to face on seats extending entirely across the cars as on English lines. There is no need of a permanent non-paying aisle in any cars except those for way business; for one section of the seats may turn up to form a temporary passage. A few inconveniences as to room, especially at say 1½ cents a mile, would be more than balanced by a little extra upholstery, and by first rate ventilation, which is really a luxury, and which common decency demands for every class of car.

Fourth—There should be on every line a stock of private family or saloon cars, arranged with every convenience, and let like a box at the opera, at a price varying with the speed of the train required, and the destination of the party. Just such cars are already paying in England and on the continent.

The second class cars used on a few New England roads can hardly test the economy of distinction in fares, for the dead weight of passengers, and the speed are first class, the only difference being upholstery, the interest on the cost of which amounts to nothing. The extreme of cheap transportation is seen on the emigrant trains of some of our trunk lines, but it would be found that the money-making result of the classification system would follow the extreme—splendid appointments and high fares.

A few new cars and engines, and a regeneration of old carriages, a part to be turned into cheap, and part into first class cars, would enable any road to inaugurate the system. Of course, for the first few months it would not be understood, but soon, as certainly there is a difference in the conditions of men, railway companies would begin to realize its substantial benefits.

It is no longer an experiment, but a fixed fact, that a distinction in accommodations and fares *pays* everybody concerned, in all sorts of countries, among all sorts of people and under every variety of circumstances. Is it possible that the American people will any longer punish themselves by sticking to a fixed system of cars, which are too expensive and fast for one class, and too uncomfortable and slow for another, and hence a source of dissatisfaction to all, especially, in the long run, to the owners of railway property.

In another letter I shall hope to remind the railway managers and the public of several matters touching stations, attendance, and the baggage-masters, which may suggest some new economies. TUBAL CAIN.

SELMA AND GULF RAILROAD.

ALLENTON, Oct. 26th, 1859.

The Stockholders of the Selma and Gulf Railroad Company, met this day, pursuant to call of the Directory. The Convention was organized by calling Col. Wm. T. Minter to the Chair, and W. S. Burr, assisted by Dr. J. D. Caldwell, to act as Secretaries.

On motion of Mr. Lapsley, the Chair appointed a committee on proxies, and to ascertain how much of the stock was represented in the Convention. This committee consisted of Rev. J. F. Burson, Dr. D. C. Smyly and J. A. Crook. The roll of Stockholders was then called, and it was ascertained, by the Committee's report,

that twenty-four hundred and fifty-three shares of the stock of the Company were represented either in person or by proxy; and this being found to be a majority of the stock of the company entitled to be represented, the Convention proceeded to business.

On motion of Mr. Lapsley, it was resolved to increase the present number of Directors by adding four, so as to make the permanent number, including the President, eleven from this time forward.

The President's Report was then read, and, on motion of Dr. Caldwell, was accepted.

To the Stockholders of the
Selma and Gulf Railroad Co.:

GENTLEMEN.—A little over one year having elapsed since the date of your organization as a company by the election of a Board of Directors, it becomes my duty to submit to you some report of what has been done to further your interests during that period.

Your Board of Directors immediately upon their election proceeded to engage the services of a suitable engineer. They selected Mr. Gavin B. Yuille, as Chief Engineer of the company, and instructed him to proceed to organize a corps of engineers for your surveys. Early in November following field operations were commenced. Thorough surveys were made of the several routes proposed for your road, and report, with maps, profiles and estimates of cost of various routes, was laid before your Board on the first of June last. Upon a careful examination of all the facts developed by the surveys, your Board were induced to adopt as the route for your Road what is known as the Eastern or Bear Creek line. It was not deemed, at that time, expedient or advisable to make location further south than near Midway, in view of the uncertainty as to what might be the route and Northern terminus of the proposed Mobile and Great Northern Road, with which it was proposed to connect as well as with the Alabama and Florida Road.

The route adopted by the Board admits of a most favorable line, as to grade, curves, directness and cheapness—admitting of grades not exceeding at any point 39 6-10 feet to the mile, and no curves exceeding three degrees, and generally much more favorable. The located line will be only about five per cent longer than an air line. The cost of 50 miles south from Selma will but little, if any, exceed \$800,000.

After the Report of our Engineer it was deemed not urgent to have the locating surveys then made, as the means of your company did not then seem sufficient to warrant the measure. Leave was consequently granted the corps to engage in other service for a short time. Owing to various causes, not necessary to enumerate, the engineers were delayed in returning to your service. They are now engaged upon the actual location of your Road, and it is confidently anticipated that the entire line, as far as the vicinity of Midway, by the latter part of December next, will be ready to contract, and some portions of it at an earlier date.

The right of way and grounds for depots have been obtained on most of the line free of cost to our company, and it is hoped the balance will soon be arranged on liberal terms, alike just to the company and creditable to the intelligence and public spirit of the proprietors whose estates we improve by the construction of this road. It will afford infinite pleasure, if, in the end, we shall be able to say that all have made *free grants* of way and depot grounds.

The means of your company in actual subscriptions to its capital stock, at the date of our organization were about two hundred and

ten thousand dollars, (\$210,000). They now amount to a little over \$380,000 in *bona fide individual* subscriptions. The Alabama and Tennessee River Company has also made a subscription of fifty thousand dollars payable in freight.

The Stockholders of the Alabama and Mississippi Rivers Company have authorized their Board of Directors to make a subscription of twenty thousand dollars. Your Board have also assurances in which they have confidence that further subscriptions to the amount of at least sixty thousand dollars will be made on the north side of the Alabama river, provided an equivalent amount shall be subscribed by citizens south and east of the Alabama river. It may be proper to remark that it is not in the contemplation of the Board to regard the railroad subscriptions referred to as any part of the five hundred thousand dollars subscription required in the conditions annexed to the subscriptions taken since the organization of the company.

The efforts made to increase the subscriptions of the Company have been untiring, and the Company is much indebted to many of its friends for aid that has been given its officers in their various efforts to raise the stock to the amount determined on by your Board soon after their election, to-wit. the sum of \$500,000; and as their determination in this particular (which they still believe was a wise one) was incorporated in and became a part of the terms of the subscriptions taken since the 9th day of November last, it is now indispensable that this sum should be reached; and the sooner the better. Some recent developments induce in your Board the belief that this may now be done so as not to delay further the early commencement of the work of construction. If this were now done, or effected within the coming month, the entire line, as far as from near Midway to Selma, can be placed under contract on very advantageous terms to be completed, perhaps, within two years, and the remainder of the line to its connection with the Mobile and Great Northern and Alabama & Florida Roads, so soon as your Board shall have the necessary facts and it shall be deemed expedient to locate that portion of your Road.

It is unnecessary now for your Board to reiterate their opinions as to the great and incalculable value of your road, not only to the country through which it is proposed to run, but to a large part of the State of Alabama, and of adjacent States. Nor is it necessary for them to reassert their confidence and full belief, that the stock of your Road when constructed cheaply for cash, will be among the most valuable in the whole country. Place it in the power of your Board to furnish promptly to contractors the cash for carrying on their work, and the work can be done rapidly and cheaply.

It is confidently believed from good data, that with a reliable cash subscription of \$500,000 and upwards, with the subscriptions of the railroads above named, say \$70,000, and subscriptions in work, which many parties will offer in the lettings to contract, probably to the amount of largely over \$100,000, making our stock list say, eventually upwards of \$700,000. Your may be finished in a very short period, say two to two and a half years from the commencement of the work of grading. Surely, upon such a basis, as to subscriptions, and holding so important a position as your line of road does between the roads centering at Selma, and the roads upon the South that will give outlet to the ports of the Gulf, we may expect to enjoy good credit so far as may then

be needed. And it would not be long before the roads to the North of and to the South would come to our aid.

In conclusion, gentlemen, we sincerely trust that such measures will be taken by the stockholders now assembled as will result in placing your whole line of road under contract as soon as it can be located, and to be completed at the earliest possible day, which need not be much exceeding two years, if the stockholders will now promptly second the efforts of their officers, and raise without further delay the balance of subscription asked.

Respectfully submitted,

W. T. MINTER,

Pres't. of the Board, S. & G. R. R.

After the reading of this report, Col. J. R. Hawthorn introduced the following resolution, viz:

WHEREAS, Assurances are given, that one half the sum required to make up the amount of five hundred thousand dollars required to be subscribed to the stock of the company to give full effect to the subscriptions which have been made, will be subscribed on the other side of the Alabama River.

Resolved, That the remainder shall be made up on this side of the river, so that arrangements may be made without delay, for putting the work of construction under contract, and for its vigorous prosecution and the early completion of our railroad.

Upon the introduction of this resolution, its adoption being moved and seconded, an interesting discussion ensued, which was participated in by Messrs. Lapsley, Watkins, Salter, J. R. Hawthorn, Hon. J. M. Calhoun, Crook, and others. The resolution was adopted and a subscription of \$30,000 was made up forthwith, [and if all the stockholders had been present, doubtless, near \$100,000 would have been made up on the spot.]

The day being then far spent, the election for Directors was proceeded to, on motion. The committee on this election consisted of Dr. Wm. Gulley, Rev. J. F. Burson and Dr. J. D. Caldwell, who certified to the election of Col. W. T. Minter, Hon. J. M. Calhoun, J. W. Lapsley, Dr. D. C. Smyly, J. Wesley Purify, Dr. Wm. Cunningham, J. R. Hawthorn, Wm. H. Linam, Capt. J. A. Crook, Maj. S. S. Andress, John Green, Sen., as Directors of the Selma and Gulf Railroad Company for the ensuing year.

The Convention then adjourned *sine die*.

W. S. BURR, Secretary.

J. D. CALDWELL, Ass't Sec'y.

PITTSBURG & STEUBENVILLE RAILROAD DIRECTORS AND SOLICITOR JOINED.—The action of the Board of Directors in the above company in choosing, on the 11th of last August, Messrs. John Barton, E. P. Jones, and J. Trunick, a committee to collect certain claims due the company, was before Court yesterday, Judges Hampton and Williams on the bench. It will be remembered that it is claimed that certain moneys coming to the said corporation had been made by due process of law, payable to James S. Craft, Esq., and that it is claimed by that the action diverting said funds to other hands was illegal.

The case coming up on Tuesday, G. P. Hamilton, Esq., appeared for Mr. Craft, and presented his case in his usual clear style, to which Mr. Barton, Solicitor for the road, replied at length. In conclusion, the Court made the following order:

And now to wit, November 1st, 1859, the bond of said complainant, with surety approved by the Court being filed, injunction awarded as follows, viz: That said company be re-

quired and enjoined, until the further order of this Court from acting under the resolution asserted to be passed by company on the 11th of August, A. D. 1859, as recorded in said bill, and that the committee appointed under said resolution, viz: John Barton, E. P. Jones and James Trunick, be enjoined from acting under said resolution, or assuming any of the duties mentioned therein, or of collecting, compromising or controlling in any manner whatsoever any of the claims of said company, which by their own showing have been assigned to said James S. Craft, and that the said John Barton be prohibited from appearing as attorney within this county, or elsewhere, to any of the suits brought in the name of the company on any of said subscriptions, or entering satisfaction in any judgement on such suit."

MONETARY AND COMMERCIAL.

For the week past money matters have continued about the same as for the week before. With the increase of currency there are also increased necessities for its use in the movement of produce and the purchase of hogs and groceries. There is no surplus capital in the hands of bankers, and although the nominal rate of discounts remain the same as when money was easy, yet it is difficult to obtain even at high figures. Bankers' charges to their depositors, if they can "do it" at all, are 10@12 per cent.; very little however is being done in the regular way, and many parties are forced to obtain money outside, at from 15 to 24 per cent. On this subject the *Cin. Com.* of this morning says, "a good deal of paper bearing heavy names is found in the street, mainly because the makers of it are a class of merchants who never keep a large deposit account."

Eastern Exchange is firm at the present quotations, with a supply sufficient to fully meet the demand.

	BUYING.	SELLING.
New York Sight.....	$\frac{1}{2}$ prem.	$\frac{1}{2}$ @ prem.
Boston.....	$\frac{1}{2}$ @ prem.	$\frac{1}{2}$ @ prem.
Philadelphia.....	$\frac{1}{2}$ @ prem.	$\frac{1}{2}$ @ prem.
Baltimore.....	$\frac{1}{2}$ @ prem.	$\frac{1}{2}$ @ prem.
New Orleans.....	par.	$\frac{1}{2}$ @ prem.
American Gold.....	$\frac{1}{2}$ @ prem.	$\frac{1}{2}$ @ prem.

During the present season, there has been, in general business, a fair trade. Merchants, however, have not been disposed to crowd goods upon their customers, in the face of the light cash remittances; hence no more goods have been forced upon the country dealers than their necessities demand. Trade, therefore, may be regarded as in a healthy condition, and with a moderate movement of the crops all parties will be able to pay their debts.

We annex the closing cash rates for the past four days, at the regular Board Sales:

	Nov.	2d.	3d.	4th.	5th.
U. S. Fives 1873-4.....	103 $\frac{1}{2}$	103 $\frac{1}{2}$	103 $\frac{1}{2}$	103 $\frac{1}{2}$	103 $\frac{1}{2}$
Virginia Sixes.....	94 $\frac{1}{2}$	94 $\frac{1}{2}$	94 $\frac{1}{2}$	94 $\frac{1}{2}$	94 $\frac{1}{2}$
Missouri Sixes.....	85 $\frac{1}{2}$	85 $\frac{1}{2}$	85 $\frac{1}{2}$	85 $\frac{1}{2}$	85 $\frac{1}{2}$
N. Y. Central Shares.....	81	81	81	81	81
N. Y. & Erie Shares.....	81	81	81	81	81
Reading R. R. Shares.....	38 $\frac{1}{2}$	39	38 $\frac{1}{2}$	38 $\frac{1}{2}$	38 $\frac{1}{2}$
Michigan Central.....	40 $\frac{1}{2}$	40 $\frac{1}{2}$	40 $\frac{1}{2}$	40 $\frac{1}{2}$	40 $\frac{1}{2}$
Michigan Southern Pref.....	17 $\frac{1}{2}$	17 $\frac{1}{2}$	17 $\frac{1}{2}$	17 $\frac{1}{2}$	17 $\frac{1}{2}$
Cleveland and Toledo Shares.....	21 $\frac{1}{2}$	21 $\frac{1}{2}$	21 $\frac{1}{2}$	21 $\frac{1}{2}$	21 $\frac{1}{2}$
Panama R. R. Shares.....	122 $\frac{1}{2}$	122 $\frac{1}{2}$	122 $\frac{1}{2}$	122 $\frac{1}{2}$	122 $\frac{1}{2}$
Illinois Central Shares.....	65 $\frac{1}{2}$	64 $\frac{1}{2}$	64 $\frac{1}{2}$	64 $\frac{1}{2}$	64 $\frac{1}{2}$
Illinois Central Bonds.....	85	83	84 $\frac{1}{2}$	84 $\frac{1}{2}$	84 $\frac{1}{2}$
Chicago and Rock I. Shs.....	63 $\frac{1}{2}$	63 $\frac{1}{2}$	63 $\frac{1}{2}$	63 $\frac{1}{2}$	63 $\frac{1}{2}$
Galena & Chicago R. R.....	73 $\frac{1}{2}$	73 $\frac{1}{2}$	73 $\frac{1}{2}$	73 $\frac{1}{2}$	73 $\frac{1}{2}$
Del. & Hudson Canal.....	97	97	97	97	97
Cumberland Coas Co.....	14 $\frac{1}{2}$	14 $\frac{1}{2}$	14 $\frac{1}{2}$	14 $\frac{1}{2}$	14 $\frac{1}{2}$
Penn. Coal Co.....	83 $\frac{1}{2}$	83 $\frac{1}{2}$	83 $\frac{1}{2}$	83 $\frac{1}{2}$	83 $\frac{1}{2}$
Pacific Mail S. S. Co.....	73 $\frac{1}{2}$	71 $\frac{1}{2}$	70 $\frac{1}{2}$	72 $\frac{1}{2}$	72 $\frac{1}{2}$

*Time Sales.

The following is the October business of the Chicago and Rock Island road, as reported by telegraph:

1859.....	\$122,610
1858.....	85,647

Increase (equal to 30 p cent.).....\$36,963

The month, last year, settled up at \$92,759.60, and should show as favorable an increase on the final settlement this year.

The earnings of the Galena and Chicago road for October were.....198,834

October, 1858.....141,652

Increase.....\$57,182

equal to 41 p cent.

The Southern Michigan gives in

October.....208,000

October, 1858.....211,000

Decrease.....3,000

On the Cleveland and Toledo Road the October earnings were.....78,000

October, 1858.....79,400

Decrease.....1,000

The New York and New Haven Railroad Company's

receipts for the month of October, 1859, were as follows:

Passengers.....100,179 59

Freight.....15,775 00

Total.....115,954 59

Due other roads.....30,103 97

85,350 62

Receipts for October 1858.....72,849 93

Increase.....13,000 69

New York and Erie Railroad Shares have sold this week at 8 $\frac{1}{2}$ @8 $\frac{1}{2}$. To-day the prices receded to 7 $\frac{1}{2}$, against 7 $\frac{1}{2}$ yesterday. The Receiver of the Company has filed his Monthly Account for October, from which we learn that the receipts from passengers and freight were as follows: Since August 16th to September 30th, 1859, 45 days, \$600,624; month of October, 1859, \$483,458. Thus the month of October is largely in excess of September. We annex the items of the Receiver's account for the past six months:

NATHANIEL MARSH, Receiver, in account with the New York and Erie Railroad Company.

RECEIPTS FOR THE MONTH OF OCTOBER, 1859.

Balance per last report.....\$39,717 98

Less Bills omitted in Report.....2 10

\$19,715 88

Old Railroad Iron and Wheels sold.....28,507 44

Unclaimed and Damaged Goods sold.....1,465 73

Rents, etc.....1,295 56

Brass Filings sold.....43 00

Discount on Money bought.....175 70

Hire of Cars.....16 42

Agent of Lake Erie Steamers.....285 08

Great Western R. R. Co., Ill.....239 42

Quincy and Toledo R. R. Co.....185 60

Mississippi and Missouri R. R. Co.....292 50

Northern Central R. R. Co.....219 07

Williamsport and Elmira R. R. Co.....206 97

Philadelphia and Reading R. R. Co.....831 53

N. Y. & Erie R. R. Co.....1,466 17

Freight and Passenger Receipts.....483,458 21

Total receipts for October.....\$558,427 21

DISBURSEMENT FOR OCT., 1859.

Sundry Acceptances for Supplies, etc.....\$42,371 30

Interest.....309 93

Long Dock Company for Interest.....4,157 86

Railroad Iron bought.....28,170 89

Charges on Freight.....24,125 63

Sundry Ticket Balances.....7,166 84

Paymasters for Operating Road.....292,518 79

Coal Furnished.....540 00

Rent Chemung R. R.....5,000 09

Bent Elmira, Jeff. and Can. R. R.....2,683 34

Tolls N. I. Railroad and Trans. Co.....2,649 35

On account judgment and Levy on Wood.....15,000 00

Sundry Bills for Supplies, etc.....79,176 54

Balance on hand 31st October, 1859.....50,926 74

Total.....\$558,427 21

In the amounts paid since August 16th, 1859, are included:

Labor and Supplies dated prev. to Aug. 16.....\$535,444 52

Ticket Balances.....11,495 86

Rents.....41,549 35

Levy on Wood.....25,000 00

On account of Aug. and Sept. Expenses.....367,287 52

Charges on Freight advanced.....68,902 44

Railroad Iron bought.....47,381 83

\$1,090,161 52

The average monthly disbursements are about.....\$275,000 00

FREIGHT RATES, ST. LOUIS EASTWARD, ON FOURTH

CLASS and FLOUR, BEGINNING NOVEMBER 8, 1859.

Fourth Class. Flour.

To Baltimore, all rail.....65c \$1 20

Do. river to Cairo, thence rail.....1 10

Do. river to Parkersburg or Pitts-
burgh.....1 00

To Philadelphia, all rail.....1 30

Do. river to Cairo and rail.....1 20

Do. river to Parkersburg or Pitts-
burgh.....1 10

To New York, all rail (or sea insured).....75 1 40

Do. river to Cairo and rail.....1 30

Do. river to Parkersburg or Pitts-
burgh.....1 20

Do. rail to Baltimore or Phila-
delphia, thence sea, not in-
sured.....70 1 30

To Boston, all rail, or sea (insured),.....80 1 60

Do. river to Cairo and rail.....75 1 40

Do. river to Parkersburg or Pitts-
burgh.....70 1 30

Do. rail to Baltimore or Phila-
delphia, thence sea, (not
insured).....75 1 40

RATES ON COTTON FROM MEMPHIS, TENN., EASTWARD.—

	TO TAKE EFFECT NOVEMBER 10TH.
River to West St. Louis, thence (rail or insured by water).....	6 10
River to West St. Louis, thence rail and Lake, or rail to Baltimore or Philadelphia, thence sea.....	5 75
River to East St. Louis or Cairo, thence rail (or insured by water).....	5 75
River to East St. Louis, thence rail and Lake, or rail to Bal- timore or Philadelphia, thence sea.....	5 50
River to Cincinnati, thence rail (or insured by water).....	5 50
River to Cincinnati, thence rail to Baltimore or Philadelphia.....	5 50
River to Cincinnati, thence rail and Lake.....	5 50
River to Parkersburg or Pittsburgh, thence rail to Baltimore or Philadelphia.....	4 75

To Boston.....	5 35	4 85	4 60	4 40
To Providence.....	5 10	4 60	4 35	4 15
To New York.....	5 10	4 60	4 35	4 15
To Philadelphia.....	4 95	4 60	4 35	4 15
To Baltimore.....	4 85	4 60	4 35	4 15

Rates from West St. Louis 50c. per bale less than from Memphis.

Rates from East St. Louis or Cairo 75c. per bale less than from Memphis.

Rates from Cairo \$1 10 less than from Memphis.

The editor of *The Com. Advertiser*, has been making a tour, and gives the annexed description of the Toledo & Wabash Road:

"The Toledo and Wabash extends next from Logansport, 77 miles, to the Illinois, about 40 miles south of the other branch to Burlington. At Lafayette it crosses the New Albany and Salem Road and connects with the Lafayette road to Indianapolis. At the southern terminus of the Illinois line it connects and runs into the Great Western from Illinois line to Naples and Meredosia on the Illinois River, 175 miles west of the Illinois State line. The Chicago branch of Illinois Central crosses the Great Western at Tolono, 43 miles west of Illinois line. At Decatur, 80 miles west on Great Western Road, it crosses the main line of Illinois Central to Cairo. At Springfield, 122 miles west of Illinois line, it crosses the St. Louis, Alton and Chicago Road. At Meredosia the Great Western connects with the Toledo and Quincy Railroad from Meredosia to Camp point, 34 miles, where it meets with the Burlington and Quincy Road, formerly Northern Cross. At Naples it connects with the Pike County Road to Hannibal, on the Mississippi River, 43 miles. This last road is in progress of construction. The road from Logansport to the Illinois State line is in progress of construction, and will be completed and in operation by the first of December next. At Toledo, the Toledo and Wabash connects with the Cleveland and Toledo east, and the Southern Michigan and Dayton and Michigan south. It also connects with all the boats on Lake Erie for Cleveland and Buffalo east, and Detroit and Chicago west. If any one will consult a map he will see the importance of these roads, as a means of transit between the lakes and the Mississippi. Besides, they pass through the most productive portion of the West, and their local business must, sooner or later, become of great importance, not only to these lines, but those between the lakes and the seaboard."

The interest Coupons on the bonds of the Lehigh Valley Railroad Company, due 1st. November, will be paid at the office of the Company in Philadelphia.

The Milwaukee and Mississippi Railroad Company are now paying the interest on the first and second mortgage bonds of that road.

GREAT SALE OF RAILROAD LANDS. 40,000 ACRES Of the Finest Arkansas Lands, at PUBLIC SALE.

Pursuant to an order of the Board of Directors of the Little Rock and Fort Smith Branch of the Cairo and Fulton Railroad Company, made on the 8th day of June, 1859, 40,000 Acres of Land will be offered for sale at the Office of said Company, in the city of Van Buren, Crawford County, Arkansas, on

MONDAY, THE 14TH DAY OF NOV., 1859, and from day to day until sold, being about one half of the lands attached to the First Division of said Road. These lands are advantageously situated upon, and near the Line of the Little Rock and Fort Smith Branch Railroad, which is now being placed in course of construction. They comprise some of the most valuable bottom and uplands in Western Arkansas, and are situated in the Counties of Crawford, Sebastian, and Franklin, and are within twenty miles of the City of Van Buren, and within twenty-five miles of the City of Fort Smith. This Railroad traverses a part of the finest and richest portion of the State, and its completion within five years, will afford railway communication with every portion of the Union. Immigration to this State has been steadily increasing until the better part of the Government Lands are absorbed. The lands attached to this road were selected and confirmed years ago, and are now brought into market for the first time, and present inducements to planters and Farmers desiring to emigrate from the older States, and rare opportunities to Capitalists for safe and remunerative investments. The climate is unequalled by any portion of the Great West for salubrity and health; the soil is remarkably productive, and the country well watered and timbered. The Company are in condition to make good title to the lands now offered for sale.

TERMS.—One third cash; one third in six months; and one third in twelve months; notes to bear interest from date, at the rate of ten per cent. per annum, until paid. Full lists of these lands, and all desirable information concerning them, will be furnished on application, personally, or by Mail, to J. B. OGDEN, Secretary, at the Company's Office, in Van Buren.

JESSE TURNER, President.

Office of L. R. & F. S. Branch of C. & F. R. Co.
VAN BUREN, ARK., August 31, 1859. Oct. 20.

To Contractors having Capital.

THE MARYLAND AND DELAWARE RAILROAD CO. will receive sealed proposals until the 1st of December for the work and materials of fifty-three miles of Road; extending from its junction with the Delaware Railroad, at Sangene, Delaware, to Oxford, Maryland; forming the shortest connection between Philadelphia and Chesapeake Bay, at a point always unobstructed by ice, near the mouth of Great Choptank River.

The resources of the Company (which is free of debt,) consist of individual stock, State appropriations, and work already done; but they propose to make payment for the work now offered, principally in First Mortgage Bonds; which they are prepared to show will be a safe, interest paying and profitable investment.

Twenty miles of the Railroad are already graded, the entire line located and secured, and the nature of the work very favorable for Contractors.

A circular containing a map and profiles, with descriptions of the character, position, and resources of the road, will be issued about the 25th inst., and sent by mail on application to I. C. W. Powell, Secretary Maryland and Delaware Railroad Co., Easton, Md.; to whom proposals will also be addressed.

Oct. 20.

TENCH TILGHMAN, President.

WILLIAMS' CINCINNATI DIRECTORY 1860.

OUR Canvassers are now engaged collecting information for the CINCINNATI DIRECTORY for 1860, (Tenth Annual Issue.) The Directory for 1860 will be greatly improved over any former issue. It will contain, in addition to Cincinnati, Directories of Covington and Newport, a complete list of Post Offices in the United States, and many other improvements. It will be issued on the 1st of January. Subscription Price will remain as heretofore, \$2.

C. S. WILLIAMS,
194 Walnut Street.

NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith
Branch of the Cairo and Fulton Rail-
road Co., Van Buren, Ark., Sep. 10, 1859.

SEALED PROPOSALS for the graduation of the First Division of twenty miles eastward from Van Buren, will be received at this office until **Thursday noon, December 1st, 1859.** The work is divided into twenty sections of about one mile each, and proposals for either a part, or the whole of this Division may be made; but no bids for less than one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise. Estimates of work done will be made on the first day of every alternate month, and payments made on the first day of the month following; and fifteen per cent. of all estimates will be retained until the completion of the contract. Contractors desiring other terms of payment may bid accordingly, as the above terms are not positively settled.

The Company having a large amount of the finest Lands in Western Arkansas, will give preference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications may be seen, and all desired information obtained, upon application at the Engineer's Office, in Van Buren.

JESSE TURNER, President.

NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith
Branch of the Cairo and Fulton R. R.
Co., Van Buren, Ark., Sep. 10, 1859.

SEALED PROPOSALS for the Masonry of the First Division of twenty miles eastward from Van Buren, will be received at this office until **Thursday Noon, December 31st, 1859.** No bids for less than the amount of Masonry upon any one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise.

Contractors will state terms of payments, and proportions of money, stock and lands, and amount to be retained by the Company to secure the completion of the contract. The Company reserves the right to reject any and all bids at its option.

Plans and specifications may be seen, and all desired information obtained on application at the Engineer's Office, in Van Buren.

JESSE TURNER, President.

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANA OR SANDOVAL

FOR

Decatur, Springfield,
Bloomington, Peoria,
Burlington, Quincy,
La Salle, Rock Island,
Dixon, Galena,
Prairie du Chien, St. Paul, and
St. Anthony,
And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANA for all the above points.

Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via

PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line
FIRST CLASS STEAMERS

Running in Direct connection with this Road for all
TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,

Gen'l Southern Agent, Cincinnati.

W. P. JOHNSON,
Gen'l Passenger Agent, Chicago.

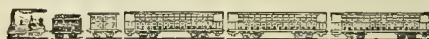
MOSELEY'S WROUGHT IRON ARCH BRIDGES —AND— Corrugated Iron Roofs ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.
Spt. 2. MOSELEY & CO.

June 21, 1859.

Cincinnati, Hamilton and Dayton



RAILROAD.

FOUR TRAINS

LEAVE THE SIXTH STREET DEPOT DAILY

TRAINS RUN THROUGH TO RICHMOND, LIMA, SANDUSKY, AND DELAWARE WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND NORTH-WESTERN CITIES.

(Columbus time, which is seven minutes faster than Cincinnati.)

6 A. M. EXPRESS TRAIN—For Cleveland and Pittsburg, via Delaware, makes close connection at Crestline for Pittsburg, Baltimore, Philadelphia, and New York; and at Cleveland for Dunkirk, Buffalo, Boston and New York. Also, connects at Dayton with Dayton and Michigan Road, for Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 7:20 P. M., Quincy and Galena at 7 A. M. Also, at Dayton, with Greenville and Miami Road, for Greenville, Union, Winchester and Muncie. Also, connects at Richmond with Indiana Central Road, for Indianapolis, Lafayette, Chicago, Terre Haute, St. Louis, and all Western Cities. Also, at Richmond, with Cincinnati and Chicago Road, for Anderson, Kokomo and Peru.

S. A. M. MAIL TRAIN—For Dayton, Springfield and Sandusky; connects at Urbana, for Columbus; connects at Sandusky with STEAMER FOR DETROIT; at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road, for Cleveland and Buffalo, Toledo, Detroit and Chicago. This train also connects at Delaware with the C., C. and C. Road, for Cleveland and points East. Also connects with Junction Railroad at Hamilton for Oxford.

4:30 P. M. TRAIN—For Dayton, Springfield and Sandusky; connects at Forest with Pittsburg, Fort Wayne and Chicago Road East and West; at Clyde with C. and Toledo Road for Cleveland and Buffalo, Toledo, Detroit and Chicago. Also, connects at Richmond for Indianapolis, Terre Haute, St. Louis and Chicago. Also connects with Junction Railroad at Hamilton for Oxford.

6 P. M. TRAIN—For Dayton, Troy, Piqua, Sidney, Lima, Fort Wayne and Chicago, reaching Chicago at 8 A. M.

For further information and Tickets apply at the Ticket Offices:—North-east corner of Front and Broadway; No. 169 Walnut street, near Gibson House; at the new Ticket Office on West side of Vine street, between the Post Office and the Burnet House; or at the Sixth Street Depot.
D. McLAREN, Superintendent.

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circular which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the retort is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet,.....	\$300 00
do do do 350 ".....	335 00
do do do 400 ".....	375 00
do do do 500 ".....	450 00
do do do 600 ".....	525 00
do do do 700 ".....	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorate rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, as now in operation in several States, apply to

R. T. COVERDALE,

167 Walnut Street, Cincinnati, Ohio, who has the exclusive right to manufacture and sell in the State of Ohio.

Feb. 24th, 1859.

APPLEGATE & CO.,
Booksellers, Publishers, Stationers & Blank Book Manufacturers,
43 Main St. Cincinnati, O.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Booksellers, Country merchants, and others to our extensive stock of School, Classical, Theological, Scientific, Standard, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the principal publishers, as well as of Paper and Stationery, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

BOOKSELLERS,

Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, Envelope, Manilla, and Tea wrap-boards, Envelopes, Gold & steel Pens, Penholders, Copying Books, Ink and saucers, Sealing Slates, Mucilage, Book rests, Bill Envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files; Date Calendars, together with all other articles used in the counting-house.

Stationers,

To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly paged, including all sizes, from the small memorandum to the large Super Royal and Impenbound in a great variety of styles and of superior workmanship. Books made to order of any description, with or without ruled and warranted in quality of paper, and durability of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

BLANK BOOK MANUFACTURERS,

We are prepared to Print and Bind books in any style desired, at rates as low as quality of work cut in this where. Our executing these the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Dray receipts, Cards, Circulars, or any other description of printing, will find that we do such jobs despatch. Orders re-

Stereotype, of any description that may be desired, can be executed by our branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Dray receipts, Cards, Circulars, or any other description of printing, will find that we do such jobs despatch. Orders re-

Publishers,

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, *Clarks' Compendium*, *Rollin's Ancient History*, *Plutarch's Lives*, *Josephus*, *Spectator*, *Chain of Sacred Wonders*, *Familiar Science*, *Webb's Monitor*, *Soden's German*, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, Books of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

43 MAIN STREET, CIN.

W. HARVEY'S SAFETY JOINT For Coupling the Ends of "T" Rail PATENTED, NOV. 2, 1858.

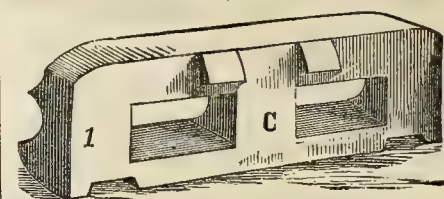


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

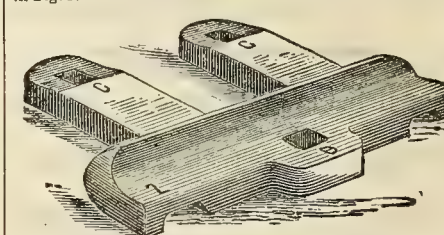
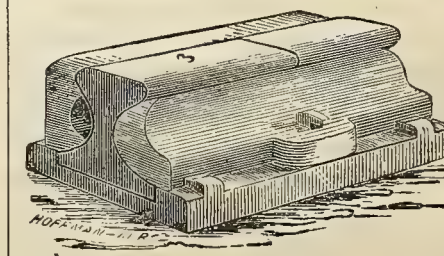


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that on one part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly free road, thereby doing away with the breaking of rails, wheels, and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
41 Jefferson-street, Albany, N. Y.
ON AGENT, Cincinnati, O.

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

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ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

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PROSSER'S PATENT SURFACE CON-
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Rollers. THOS. PROSSER & SON,
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W. G. LOBDELL. H. S. M'COMBS. D. P. BUSH.

BUSH & LOBDELL,
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MANUFACTURERS OF

CHILLED WHEELS

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TIRES,
For R. R. Cars & Locomotive Engines,
ARE PREPARED TO

Execute Promptly Orders to any Extent
FOR THEIR
CELEBRATED WHEELS,
EITHER SINGLE OR DOUBLE PLATE,
WITH OR WITHOUT AXLES.

WHEELS FITTED
To Hammered or Rolled Axles,
In the best manner, at the shortest notice, and on the
Most Reasonable Terms.

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JUST PUBLISHED
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For Post-Masters and Business Men.
CONTAINING

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and Territories, arranged by States and Counties; A
Complete List of all Distributing Post-Offices; Rates of
Foreign and Domestic Letter Postage; Rates of
Printed Matter, Transient and Regular; Abstract
of the Laws and Regulations of the Post-Office De-
partment, &c., &c.

COMPILED BY E. PENROSE JONES,
Late Assistant Post-Master at Cincinnati.
Price Twenty-Five Cents.

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U. S. BLANK AGENCY, CINCINNATI POST-OFFICE, }
January, 1859.
This work has been carefully compiled and corrected by
E. PENROSE JONES, Esq., late Assistant Post-Master of the
Cincinnati P. O., from the Records in this Department, and
other sources, and contains the most complete list of Post-
Offices especially of the Western, North-Western, and
South-Western States, yet published.
MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an octavo pamphlet of about 100 pages.
The entire matter is kept standing in type, and as the com-
piler is promptly advised of all New Offices, Changes and
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up to the last day of publication, an advantage possessed
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OBSERVE, That this list is arranged by States and Coun-
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Copies for \$2.00.

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194 Walnut Street,
Cincinnati, Ohio.

Mar 10, 1859

WHEELER & WILSON'S



SEWING MACHINES.

W. M. SUMNER & CO., cor. Fourth and Wal-
nut Streets, second floor, Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky., Columbus, O.,
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We offer the Wheeler & Wilson Sewing Machine, with
important improvements, at a reduction on former prices;
and to meet the demand for a good, LOW-PRICED FAMILY
MACHINE, have introduced a new style, working upon the
same principle, and making the same stitch, though not so
highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALIKE ON
BOTH SIDES, impossible to ravel, and leaving no chain or
ridge on the under side, the economy of thread, and adap-
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the most successful and popular Family Sewing Machine
now made.

At our various offices we sell at New York prices, and
give instructions, free of charge, to enable purchasers to
sew ordinary seams, hem, fell, quilt, gather, bind, and
tuck, all on the same machine, and warrant it for three
years.

Send or call for a circular, containing all particu-
lars, prices, testimonials, etc.
WM. SUMNER & CO.

1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th
Corby, Gossin & Co.'s make, for sale very
low by
TRAVER & AUBERY,
7 Public Landing

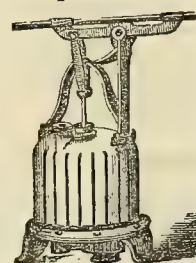
GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND
Compound Steam Pumping Engine,



WOULD respectfully invite
the attention of RAILROAD
Companies, Manufacturer
Distillers, Miners, and the pub-
lic generally to these Pumps:
as the best Pump now in use
and acknowledged by all who
have used them to be perfect-
are simple in their construc-
tion, compact, durable and not
likely to get out of order; well
adapted for Steamboats, Rail-
road Water Stations, Distill-
eries, Breweries, Furnaces,
Mines, Rolling Mills, Paper
Mills, Factories, Wells, &c.
terns, Stationary Fire Engines, Garden Engines and for
all purposes where a Pump can be used. Also, for forc-
ing a large body of water to a great height or distance
rapidly.

Also, McGowan's Patent Ball Valve Pump, designed
for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings
Lead, Copper and Gas Pipe furnished at their westma-
kel prices.

Full and perfect satisfaction guaranteed in all cases,
when properly put up according to directions.
Orders thankfully received and promptly filled at the
shortest notice.

SILVER MEDAL (The highest prize) awarded
for the Compound Steam Pumping Engine at the late Fa-
Ohio Mechanics' Institute. June 18, 1855—1

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co.,
Pennsylvania, are prepared to execute orders for Street and
other Rails on terms favorable to parties wanting to pur-
chase Ag. 4, m. 6.

FREEDOM IRON COMPANY,

MANUFACTURERS OF

LOCOMOTIVE TYRE,
Engine and Car Axles, Pump and Piston Rods,
Bar of all Sizes,
And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't.

This Iron is all made from best Juniata cold-blast char-
coal Pig Iron, refined with Charcoal in the old-fashioned
Forge Fire, hammered into a Bloom from which Iron is
hammered. The whole operation from ore to finished Iron
is conducted at our own Works. June 9.

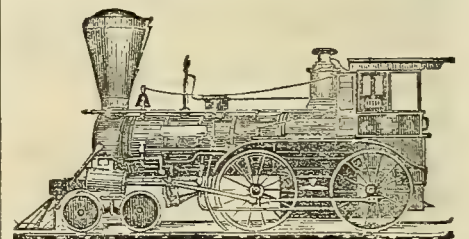
New Time Table

OF THE

NEW YORK CENTRAL R. R.

	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp.	7 00 A. M.	7 00 P. M.	7 00 P. M.
Mail	9 10 A. M.	12 50 A. M.	
New York Exp.	11 15 A. M.	9 10 P. M.	9 00 P. M.
Night Exp.	5 00 P. M.	4 00 P. M.	4 00 P. M.
Utica Accom'n.	6 00 P. M.	Ar. U. 10 00 P. M.	
N. Y. Mail	11 15 P. M.	10 0 A. M.	10 00 A. M.
	Leave Buffalo.	Leave Bridge.	Ar. Alb'y
New York Exp.	5 15 A. M.	5 15 A. M.	3 30 P. M.
Steamboat Exp.	8 00 A. M.	8 00 A. M.	8 00 P. M.
Mail			2 30 P. M.
Cleveland Exp.	6 00 P. M.	6 00 P. M.	4 40 A. M.
Cincinnati Exp.	11 00 P. M.	11 00 P. M.	8 30 A. M.
Utica Accom'n.			10 00 A. M.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotiv
equal in efficiency and durability to the best Eastern
manufacture. Also, Shaping and Slotting Machines
suitable for railroad shops. Also, all kinds of heavy
forging and casting done at short notice. Also, bolts for
bridges cut with dispatch.
ap. 20
MOORE & RICHARDSON.

THE KENTUCKY MILITARY INSTITUTE

DIRECTED by a Board of Visitors appointed by the
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Geology; also in English Literature, Historical Read-
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The twelfth annual term is now open. Charges, \$102
per half-yearly session, payable in advance.
Address the Superintendent, at "Military Institute,
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P. DUDLEY,
President of the Board,
Jan 5th.

The Railroad Record.

E. D. MANSFIELD, }
T. WRIGHTSON. } Editors.

CINCINNATI:
Thursday Morning, Nov. 10, 1859.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.
To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

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A square is the space occupied by ten lines of Nonpareil.

One square, single insertion,.....	\$1 00
“ “ per month,.....	3 00
“ “ six months,.....	12 00
“ “ per annum,.....	20 00
“ column, single insertion,.....	5 00
“ “ per month,.....	10 00
“ “ six months,.....	40 00
“ “ per annum,.....	80 00
“ page, single insertion,.....	15 00
“ “ per month,.....	25 00
“ “ six months,.....	110 00
“ “ per annum,.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

For The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

RALEIGH AND GASTON RAILROAD.—The Annual meeting of the Stockholders of this Company was held in the city of Raleigh last week. The receipts for the year ending the 30th of September, 1859, were:

From the legitimate business of that year.....	\$252,268 24
From which deduct the expenditures.....	168,289 21
Leaving the balance of.....	\$89,979 03

Which shows a net profit on the business of last year of about nine per cent. The Directors have declared a dividend of six per cent.—the balance, after carrying \$12,000 to the sinking fund, has been appropriated to permanent repairs and buildings now being put on the Road.

NORTHWESTERN VIRGINIA R. R.—We have before us the Time Tables of this road, for which the Company will accept our thanks. The new tables went into operation on the 14th inst.

BALTIMORE AND OHIO R. R. TIME TABLES.—The ever attentive management of this road has supplied us with copies of the new tables that went into effect on the 13th inst. See advertisement in another column.

AXIAL LINES OF RAILROADS.

RAILROAD CENTERS.

In our last we described the axial lines of road, East and West, viz: the Northern, the Central, the Southern, and the South-western. We shall turn now to the North and South lines, or rather to the attempts to make—for singular as it may seem, there is not a single North and South line of Railroad complete in the United States! It is true, that there are railroads passing obliquely from the North to the Southern States; so that, except in the Ohio Valley, persons can not pass from Northern to Southern States. But, even these oblique lines are confined to the Atlantic States. From the East end of Lake Erie to the Rocky Mountains, there is not a single Railroad line, which will lead directly and continuously South to the Atlantic seaboard. There is, however, one great line nearly complete; and one which still wants 150 miles of completion. We shall now describe these, and their prospects.

1. The AXIAL LINE OF THE MISSISSIPPI; composed of the Illinois Central and the Ohio and Mobile Roads.

This is a direct Axial north and South; the Northern extremity being Chicago, on Lake Michigan; and the Southern, Mobile on the Gulf of Mexico. The completed and incomplete parts of this road are as follows, viz:

Chicago to Centralia.....	254 miles.
Centralia to Cairo.....	113 “
Cairo to Columbus, (unfinished).....	20 “
Columbus to Jackson.....	87 “
Jackson to West Point (unfinished).....	100 “
West Point to Mobile.....	232 “
Aggregate.....	806 “

In regard to this line, we shall perceive two facts, which are of great importance, and may hereafter lead the public mind to think more highly of North and South lines.

1. This Axial is almost entirely parallel to the Mississippi river, at a general average of about one hundred miles distance. It follows from this fact, that the road will have a local business of its own quite sufficient, while for all that kind of business which passes between the Upper Mississippi and the Gulf of Mexico, it will be a competition with the Mississippi. How far it can compete successfully with the Mississippi, we shall see.

2. One branch of the Illinois Central goes to Galena and Dubuque. From Dubuque to New Orleans is 1,500 miles by the river. From Dubuque to New Orleans by Railroad is 893 miles; so that, it is 607 miles further by the river, than by railroad, assuming passenger trains at twenty miles, and steamboat at ten miles, for the whole distance; and we find that a person will go from Dubuque to New Orleans—

By Steamboat.....	6 days.
By Railroad.....	2 “

In the transportation of passengers, there can be no competition by the river against the Road; for the boats can not (with six days

boarding) make the cost materially less than the road.

Now, let us take the freight time of the road, at twelve miles, and that of steamboat, as before, ten miles:

Freight, by Boat.....	6 days.
Freight, by Railroad.....	3 “

In the case of freight, there may be some competition on the score of cheapness; but, even this would not hold in the up freight, and not to any great extent down; for the Railroad offers two advantages, in commerce, of great importance, viz, three days less interest, on cost; and three days better chance, with the markets. In our opinion, these are conclusive, and the axial line of the Mississippi is destined to make considerable change in the commerce of that river.

2. The CENTRAL AXIAL LINE, from the Lakes to Florida. This has two northern points, Toledo and Mackinaw; and may have three or four on the South, such as Charleston, S. C.; Brunswick, Ga.; and Pensacola, Fla. The center of this line is Cincinnati, where it intersects the Central City Line—East and West. The part of this line, nearest completion, is as follows, viz:

Toledo to Dayton.....	144 miles.
Dayton to Cincinnati.....	60 “
Cincinnati to Nicholasville.....	111 “
Nicholasville to the Gap.....	120 “
Gap to Knoxville.....	40 “
Knoxville to Dalton.....	110 “
Dalton to Atlanta.....	100 “
Atlanta to Augusta.....	171 “
Augusta to Charleston.....	137 “
Aggregate.....	993 “

This line may, of course, be varied, by considering Sandusky, Cleveland, or Detroit, as the northern terminus; and Savannah, as the Southern, or when such a line is completed—Brunswick, on the Atlantic. It is seen, that only one hundred and sixty miles remains in order to complete the entire line of rail between Toledo and Charleston, S. C. The effect of such a communication can not, for a moment, be doubted. The business and social intercourse, which we now see, so easily carried on between St. Louis and New York, will be carried on just as easily between Ohio and Carolina, or Georgia. There is a great business seeking this route now, and for want of it is either not done, or pursues a circuitous route. We import iron into Cincinnati from Northern Georgia; and we should export manufactures largely to the same region, if we could do it directly and speedily. The intermediate country is one of great resources; yet, because the southern part of Kentucky is thinly inhabited, and the State gives no aid, there is no road from Kentucky river to the Cumberland mountains.

The Central Axial, North and South, has another modification, which we have repeatedly advocated in these columns, and which we must believe will speedily be accomplished. We mean the line from Mackinaw to Pensacola, or Brunswick. To accomplish this, a new work from Dayton to Mackinaw must be made, and a Southern link in Flori-

da, or Alabama. We have shown heretofore, that no road in the United States passes through so many lines of latitude, or would have in its own route so great a variety of products. This line must, at some time, be accomplished—especially as the Government has made large grants of land to the Michigan Road, which are the most difficult (financially) to construct.

It may be interesting to look at the Railroad CENTERS, in the West. These are principally Cincinnati, Columbus, Cleveland, Dayton, and Toledo, Ohio. Indianapolis, Ind. Louisville, Ky. Chicago, Ill. Milwaukee, Wis. Detroit, Michigan, and St. Louis, Missouri. In putting down the length of line to each of these, we must be careful not to branch on the line properly to another center. We have done this as impartially as possible, in the following table. The minor places, such as Columbus, Dayton, etc., are included in the long lines of other places; still, they may fairly claim to be centers of a local traffic, brought on these lines.

1. OF CINCINNATI.

Cincinnati and Columbus.....	119 miles.
Springfield Branch.....	20 "
Cincinnati and Marietta.....	173 "
Hillsborough Branch.....	17 "
Cincinnati and Zanesville.....	94 "
Dayton and Sandusky.....	216 "
Delaware Branch.....	50 "
and Toledo.....	144 "
Greenville.....	131 "
Dayton and Indianapolis.....	84 "
Xenia.....	15 "
Springfield and London.....	20 "
and Western.....	108 "
and Indianapolis, (Ind.).....	110 "
Eaton.....	40 "
St. Louis.....	200 "
Nicholasville, (Ky.).....	111 "
Aggregate.....	1,568 "

It can not be fairly said that a single mile of this 1,600 belongs more to any other point, than to Cincinnati. If the prolongation of these lines were included, they would, of course, include thousands more; but, the principle we have here observed is to take only those parts which substantially transact their business at this point.

2. OF CHICAGO. Acting on the same principle, we find St. Louis and Milwaukee competitors with St. Louis, on certain lines, and must, therefore, divide them.

Chicago and Cairo.....	367 miles.
Dubuque.....	188 "
Toledo.....	243 "
Rock Island.....	182 "
Peoria Branch.....	47 "
Springfield.....	188 "
Janesville.....	91 "
Fulton.....	136 "
Racine.....	62 "
Whitewater.....	100 "
Galesburg.....	168 "
Aggregate.....	1,772 "

There are other roads connecting with these, and claimed for Chicago; but, they are excluded as belonging more properly to other places.

3. OF LOUISVILLE. Of late, Louisville has been stretching out its arms, and will derive a corresponding advantage. In Louisville, we include New Albany and its connections.

Louisville and Frankfort.....	65 miles.
Louisville and Lebanon.....	37 "
Jeffersonville and Indianapolis.....	108 "
New Albany and Salem.....	288 "
Louisville and Nashville.....	74 "
Aggregate.....	572 "

4. OF ST. LOUIS.

St. Louis and Springfield.....	93 miles.
St. Charles.....	169 "
Jefferson.....	163 "
Pilot Knob.....	87 "
Vincennes.....	140 "
Aggregate.....	652 "

OF MILWAUKEE. This rising town has had a great deal of Railroad enterprise, and beyond doubt will be one of the largest of the North-western cities.

Milwaukee and Racine.....	23 miles.
Prairie du Chien.....	192 "
Monroe Branch.....	42 "
and Columbus.....	64 "
Horicon and Berlin.....	93 "
and La Crosse.....	200 "
Aggregate.....	614 "

The Milwaukee lines stretching out into the immense and indefinite North-west, will, no doubt, be greatly extended, and unless St. Pauls should intercept, and concentrate their trade, Milwaukee is likely to derive more substantial benefits from Railroads, than any city of the North-west.

Revised and Corrected List of Freight Rates as adopted at a Convention of Freight Agents held at the Burnet House, November 10th, 1859.—At an adjourned meeting of the representatives of Western Railroad Companies interested—held at Cincinnati November 10, 1859, the following rates were agreed upon to take effect on the 14th, inst:

FROM CINCINNATI.

	1st.	2d.	3d.	4th.	Flr.
To New York, all rail.....	\$1 40	1 10	85	60	1 15
To " rail and water.....	1 30	1 02	80	55	1 05
To Boston, all rail.....	1 50	1 20	90	70	1 30
To " rail and water.....	1 40	1 10	85	65	1 20
To Philadelphia, all rail.....	1 30	1 00	80	53	1 09
To " rail and water.....	1 20	92	75	48	90
To Baltimore, all rail.....	1 20	90	70	48	90
To " rail and water.....	1 10	82	65	43	80
To Pittsburgh, all rail.....	55	45	35	30	20
To Toledo.....	50	40	30	20	20
To Detroit.....	50	40	30	22	40
To Cleveland.....	50	40	30	22	40
To Buffalo, all rail.....	70	55	43	33	60
To " rail and water.....				30	55
To Troy, Albany, and Schenectady, all rail.....				63	1 29
To " rail and Lake.....				59	1 15

FROM DAYTON, SPRINGFIELD, URBANA, AND PIQUA.

	1st.	2d.	3d.	4th.	Flr.
To New York, all rail.....	\$1 40	1 10	85	58	1 10
To " rail and water.....	1 30	1 02	80	53	1 00
To Boston, all rail.....	1 50	1 20	90	68	1 25
To " rail and water.....	1 40	1 10	85	63	1 15
To Philadelphia, all rail.....	1 20	90	75	51	95
To Baltimore.....	1 10	80	65	46	20
To Pittsburgh.....	55	45	35	30	50

FROM INDIANAPOLIS.

	1st.	2d.	3d.	4th.	Flr.
To New York, all rail.....	\$1 45	1 15	90	63	1 20
To " rail and water.....	1 35	1 07	85	58	1 10
To Boston, all rail.....	1 55	1 25	95	73	1 35
To " rail and water.....	1 45	1 15	90	62	1 25
To Philadelphia, all rail.....	1 25	95	80	58	1 05
To Baltimore.....	1 15	85	70	53	95
To Pittsburgh.....	60	50	40	33	55
To Cleveland.....	55	45	35	25	45
To Buffalo.....	70	55	43	35	60

LOUISVILLE AND JEFFERSONVILLE.

	1st.	2d.	3d.	4th.	Flr.
To New York, all rail.....	\$1 60	1 25	1 00	68	1 28
To " rail and water.....	1 50	1 17	95	63	1 18
To Boston, all rail.....	1 70	1 35	1 05	78	1 43
To " rail and water.....	1 60	1 25	1 00	73	1 33
To Philadelphia, all rail.....	1 50	1 15	95	61	1 13
To " rail and water.....	1 40	1 07	90	56	1 03

To Baltimore, all rail.....	1 40	1 05	85	56	1 03
To " rail and water.....	1 30	97	80	51	93
To Toledo, all rail.....	60	50	40	30	..
To Detroit, all rail.....	60	50	40	32	..
To Cleveland, all rail.....	60	50	40	32	54
To Buffalo, ".....	60	55	43	43	74
To Pittsburgh, ".....	65	55	45	40	64

MADISON, IND.

	1st.	2d.	3d.	4th.	Flour.
To New York, all rail.....	\$1 60	1 25	1 00	66	1 24
To " rail and water.....	1 50	1 17	95	61	1 14
To Boston, all rail.....	1 70	1 35	1 05	76	1 39
To " rail and water.....	1 60	1 25	1 00	71	1 29
To Philadelphia, all rail.....	1 50	1 15	95	59	1 09
To " rail and water.....	1 40	1 07	90	54	99
To Baltimore, all rail.....	1 40	1 05	85	54	99
To " rail and water.....	1 30	97	80	49	89
To Pittsburgh.....	65	55	45	38	60

FROM RICHMOND, IND., AND POINTS EAST, ON IND. CENTRAL R. R.

	1st.	2d.	3d.	4th.	Flour.
To New York, all rail.....	\$1 45	1 15	90	63	1 20
To New York, rail and water.....	1 35	1 07	85	58	1 10
To Boston, all rail.....	1 55	1 25	95	73	1 35
To " rail and water.....	1 45	1 15	90	68	1 25
To Philadelphia, all rail.....	1 25	95	80	56	1 05
To Baltimore, all rail.....	1 15	85	70	51	95
To Pittsburgh.....	60	50	40	33	55

FROM CAMBRIDGE CITY, IND., AND POINTS EAST, AS FAR AS RICHMOND.

	1st.	2d.	3d.	4th.	Flour.
To New York, all rail.....	\$1 45	1 15	90	65	1 25
To " rail and water.....	1 35	1 07	85	60	1 15
To Boston, all rail.....	1 55	1 25	95	75	1 40
To " rail and water.....	1 45	1 15	90	70	1 30
To Philadelphia, all rail.....	1 25	95	80	58	1 10
To Baltimore, all rail.....	1 15	85	70	53	1 00
To Pittsburgh.....	60	50	40	35	60

FROM KNIGHTSTOWN, IND., AND POINTS BETWEEN CAMBRIDGE AND INDIANAPOLIS.

	1st.	2d.	3d.	4th.	Flour.
To New York, all rail.....	\$1 45	1 15	90	66	1 27
To " rail and water.....	1 35	1 07	85	61	1 17
To Boston, all rail.....	1 55	1 25	95	76	1 42
To " rail and water.....	1 45	1 15	90	71	1 32
To Philadelphia, all rail.....	1 25	95	80	59	1 12
To Baltimore, all rail.....	1 15	85	70	54	1 02
To Pittsburgh.....	60	50	40	36	62

J. N. KINNEY, Chairman.
LAFAYETTE DEVENY, Sec'y.

MISSISSIPPI AND TENNESSEE R. R.

M. & T. R. R., AUDITOR'S DEPARTMENT,
Memphis, Nov. 8, 1859. }

EDITOR RAILROAD RECORD:

DEAR SIR:—Enclosed I send you comparative statement of receipts and expenses; also, cotton received by this road for October, 1858, and 1859:

OCTOBER, 1858.

Passengers.....	\$ 5,440 89
Freight.....	17,407 53
Mail.....	268 75
Express.....	46 66
Expenses.....	\$23,263 83
	5,424 57

Net receipts.....\$17,839 26
Cost of operating.....24 per cent.
No. Bales Cotton.....11,231

OCTOBER, 1859.

Passengers.....	\$ 6,051 56
Freight.....	21,922 96
Mail.....	368 75
Express.....	85 54
Expenses.....	\$28,428 81
	5,804 02

Net receipts.....\$22,624 19
Cost of operating.....20 per cent.
No. Bales Cotton.....15,438

Increase.....11,234

Increase.....4,204

The officers at present are Col. F. M. White, President, and R. Hough, Genl. Superintendent. Mr. Newell, our Supsrintendent, having left.

In haste, yours,
F. S. RICHARDS, Auditor.

(From the Hamilton Spectator.)

ANNUAL MEETING OF SHAREHOLDERS OF THE GREAT WESTERN RAILWAY

The annual meeting of the Shareholders of the Great Western Railroad Company was held yesterday in the Board Room at the Company's office.

John Young, Esq., the Vice President of the Company, occupied the chair, supported, at the table of the Board, by the Secretary, W. C. Stephens, Esq., and by three Directors, Messrs. Reynolds, Gates and Becher. The non-official shareholders present were Colonel Gourlay, Mr. White, of Barton Lodge, Mr. Malcom, of Galt, Messrs. Totten, D. and J. Allchin, of Paris, and Mr. Monteith, of Hamilton.

Proceedings commenced by the reading of the report and statements of accounts, which being done—

Mr. TOTTEN said he presumed the report was correct and satisfactory as a report, but he would like to have a little additional information respecting the Detroit and Milwaukee road. Were the Great Western Railway Company fully secured on the advances they had made to that enterprise? He had been told there were other mortgages prior to that held by the Great Western. He would also like to know whether the Michigan line fully answered the expectations of the Directors, as a feeder.

Mr. YOUNG said the Company considered the security they held for their advances ample. It was a third mortgage and possession. It might be said the security was a third and fourth mortgage, for there were two separate advances made, secured by separate mortgages, both which were held by the Company. The traffic of the Milwaukee line had been increasing very satisfactorily; quite as much so as could have been expected. The receipts were going up to a very respectable amount, one week they were nearly \$20,000, and for several weeks past they had been over \$15,000 per week. And there was more freight coming across Lake Michigan than the boats could carry, in so much that the state rooms were being placed above, on deck, to enable the steamers to carry more.

Mr. TOTTEN had heard there had been some failure with the boats.

Mr. YOUNG—No. He believed not. On one occasion indeed, a severe and almost unprecedented storm raging, one boat had to be put back. She was making but little headway, and the Captain thought it more prudent to return, because even had he reached the other side he could hardly have landed his passengers.

Mr. TOTTEN—Did the Vice President think the boats would be successful?

Mr. YOUNG had very little doubt of it.

Mr. WHITE said it struck him the Great Western Railway had a very severe trial before, with steamers which it was confidently expected would be successful.

Mr. YOUNG observed that these boats were not the property of the Company.

Mr. WHITE—Perhaps not, but the Great Western Railway Company had an interest in them, and had a preponderance even in the election of Directors to control them.

Mr. YOUNG—That was partially true. But it was acquired owing to the advances made, and the question was whether the security was ample. He might perhaps answer it by stating that there was only £1,000,000 for which a claim was held on the Detroit and Milwaukee line prior to that of this Company.

Mr. TOTTEN—Has the business of the Company been sufficient to the interest on its debt?

Mr. REYNOLDS might perhaps allude to one or two other matters before answering that question. Reference had been made to the steamers the Company formerly had on Lake Ontario, and parallel drawn between them and those now on Lake Michigan. The two cases were entirely dissimilar. The Detroit and Milwaukee Company could not get any through traffic whatever, and could not pass it on to the Great Western, without bridging the lake, either by having steamers or hiring them. Now these two steamers had been built by private individuals, on the arrangement that they should be purchased within three years. They were doing there work and earning their bread well. One proprietor had asked whether the Detroit and Milwaukee line was paying running expenses and the interest on its debt. It had not been in a position to carry through traffic until the boats were put on, and probably had not paid interest on its debt up to that time. But he had just been extracting the weekly earnings of the railway, and from them the shareholders could judge as to its position. In the week ending 1st July, 1858, its earnings were \$6,460. The corresponding week this year they were \$11,277. And since then they ran thus:—

1859. Week ending July 14.....	\$ 9395
“ “ 21.....	8967
“ “ 28.....	9894
“ “ August 4.....	10874
“ “ 11.....	10332
“ “ 18.....	11472
“ “ 25.....	11490

This was the week in the beginning of which the new steamers were put on, and the difference in traffic they created was at once apparent.

Week ending Sept. 1.....	\$14214
“ “ 8.....	15269
“ “ 15.....	15286
“ “ 22.....	14497
“ “ 29.....	17332
“ “ Oct. 6.....	19658

These returns showed very satisfactory features indeed; and as regards the Great Western Railway Company, there could not be the slightest doubt that indifferent as the last half-year's traffic had been, the net revenue had been at least \$3000 a more than if the Detroit and Milwaukee Company had existed. This was for through freight, which had been carried without farthing's additional expense, because the same trains connected, and would have had to run, in any case. The traffic, he thought, would go on increasing; the boats were doing well; they wanted more accommodation than they had. The Directors had made considerable additions to the wharves at Detroit, but not enough, as he had seen when lately on the spot.

Col. GOURLAY said it struck him, on reading the proceedings of the late meeting of shareholders in England, that there were matters which should be explained, for the satisfaction of all and the benefit of the company. In the balance-sheet of January 1, 1859, he saw there was a “balance due to the bankers, contractors and others” of \$1,112,118. Now, this he would inquire how much of this had been due to contractors, how much to bankers and how much to “others?”

Mr. REYNOLDS said there was £150,573 sterling due to the London Joint Stock Bank—(and, on the other hand, \$66,869 due by the Commercial Bank here to the Company)—£2,235 due to the contractors—principally “engineering per centages”—and £72,709 due for sundries. These figures represented pounds sterling.

Col. GOURLAY wished the corresponding distinction to be made relative to the \$1,014,697 due on the 31st July, 1859.

Mr. REYNOLDS. Due to London Joint Stock Bank £140,733 stg. (and due from bankers here £2850)—to contractors £2,238 and to sundries £65,528.

Mr. WHITE asked what interest bankers here allowed the Company.

Mr. YOUNG. None at all—it is a current account.

Mr. WHITE. What interest did the Company pay the Bank in England?

Mr. YOUNG was understood to say $4\frac{1}{2}$ per cent.

Mr. D. ALLCHIN. What about the “balances due” from other railways.

Mr. YOUNG and Mr. REYNOLDS explained that these balances were due for through tickets given by other lines. They were collected every month, so that at any given time there was always an amount due.

Mr. ALLCHIN next inquired what was the nature of the arrangement said to have been recently concluded with the Grand Trunk Railway.

Mr. YOUNG. It will merely be a traffic arrangement between the two Railways.

Mr. ALLCHIN had seen in some paper that the road was to give the Grand Trunk half its savings.

Mr. YOUNG. The rate varied. The Grand Trunk would receive a certain per centage on all Eastern freight. This was simply to avoid competition for the same freight, which would cause a lowering of rates and tend to the destruction of the property of both Companies. The general outlines of the arrangement were understood; the details were not yet published.

Mr. WHITE asked what had been done with the Company's claim against the late Mr. Zimmerman's estate, for hire of locomotives to run on the Erie and Ontario line. It was more than £2000.

Mr. STEPHENS thought it had been charged against him on account, against the construction account of the Sarnia line, which was now before arbitrators.

Mr. WHITE then inquired what had become of the claim the Company had against the Toronto people for the celebration expenses at the opening of the road.

Mr. YOUNG was afraid that was a bad debt. The original amount had been \$4,600, of which \$2000 had been received.

Mr. REYNOLDS said he had spoken about it a dozen times.

Col. GOURLAY said when he was a Director he remembered Mr. Harris had opposed the incurring of this expense, and Mr. Brydges was the one who had gone into it.

Mr. WHITE then inquired what had been done with the sum Mr. Harris had refused to take?

Mr. YOUNG said it was still standing to his credit.

Mr. WHITE then remarked that he thought it wrong that Director's proxies should be in the hands of the managers here, who were thus enabled to vote down any proposition that might be made. He thought some of the Directors here must feel themselves in an awkward predicament, as they could not carry anything.

Mr. YOUNG said the proxies were not held by any one individual—there were four of them, and one was held by Mr. Brydges, Mr. Juson, Mr. Reynolds, and himself. They had, however, never been used.

Col. GOURLAY said this was an improvement on the old plan. When he was at the Board,

Mr. Brydges and Mr. Juson held them all, and could do whatever they pleased.

Mr. BECHER suggested that a meeting of Shareholders was not the place to discuss this matter.

Mr. WHITE.—Then, again, no man sitting at that table had a right to audit his own accounts. He did not know whether this was still done, but it had been done.

Mr. REYNOLDS said the accounts were audited by the Board—not by any one individual.

Mr. WHITE. No man who audited ought to be a Director.

Mr. YOUNG. No Director had any account to settle.

Col. GOURLAY had seen Directors sitting at that table with there own accounts before them.

Mr. REYNOLDS. Everything was done now, in the most careful manner.

Mr. YOUNG. The Company did sometimes buy hardware of Mr. Juson, but he could not be looked upon in the light of a contractor. If the Company required fifty tons of spikes, or so, and could get them best at Mr. Juson's, there was no reason why they should not suit their convenience.

Mr. WHITE. Never mind. The thing could not be advocated! It was impossible to defend it!

Col. GOURLAY then said that before he left the room he would take opportunity of putting on record his opinion, that the connection between the Great Western line and that in Michigan was a deplorable one. It would have been far better for the shareholders had they confined their operations to their own territory, although to build lines elsewhere might be for the benefit of English shareholders, capitalists and contractors.

Mr. WHITE said if the original prospectus of the Great Western had been adhered to, the shares of the Company would be paying 20 per cent. steadily. But as it was, the Directors sitting at Board had damned the road.

Mr. White and Col. Gourlay here withdrew.

The remainder of the business done was of a routine character—votes of thanks to the Canadian Board, of confidence in Mr. Brydges, and the re-election of Directors.

(From the U. S. Railroad and Mining Register.)

PLAN FOR REORGANIZING THE DEBTS OF DEFAULTING RAILWAY COMPANIES, WHERE THERE IS MORE THAN ONE CLASS OF CREDITORS.

SIR:—Much has been written and more said, during the past two or three years, respecting the existing depression in railway investments, of this country. While the price of nearly description of property has fallen during the same period, this particular investment seems to have been singled out and proscribed by capitalists. Why is this? Have not investments made in Western lands, and the various other enterprises of the day, been equally unproductive? Such, I believe, is the general experience. Those who have made investments generally during this period, have been drawn into them by long credits and promises of a large interest upon their money, and have found that they have paid "too dear for the whistle."

Such has been particularly the case with investors in railway bonds. If the railways had all been built upon a sound stock basis, amounting to two-thirds, or at least one-half of the cost

of the work, no more roads would have been constructed than the wants of the country justified, and but few would then have failed to pay dividends. Instead of this policy, the seven, eight and ten per cent bonds of these Companies, issued generally without charter or other limitation, have been sold at from 90 down to 50 per cent. of their par value—covering in the discount thus allowed, nearly the whole stock basis, and in many instances greatly exceeding it. The debt of the Companies, by this means, has been made to represent more than the cost of the work.

If capitalists had required, as they do in loaning money upon real estate, a basis of 50 per cent. of the actual value of the property offered as a security, all the money necessary for legitimate railway projects in the United States could have been obtained on six per cent bonds, at or near *par*. They suffer themselves, however, to be seduced by promises of a high rate of interest, which was punctually met from the principal borrowed, as long as the latter lasted, and and afterwards, while money could be obtained in the same way, on second class securities, income bonds, or other devices. The punctual payment of interest upon these bonds seemed to be a sufficient warrant to the agencies of foreign capitalists and iron masters to receive them without examination of the merits of the enterprise upon which they were founded, or the source from which the interest had been paid was obtained. In venturing means upon this unsound basis, the transaction assumes the character of a commercial speculation, in which the parties risk their money upon contingencies, and must expect to apply the same rules in adjusting their claims as are customary against ordinary commercial debtors when a failure occurs.

It can not be that the property located "avenues," by which the social and commercial intercourse between the different sections of this great country is now almost wholly carried on, will not afford fair profits upon *all* of the legitimate capital invested in them.

Such has been almost universally the result upon *Southern* railroads, where the unfounded suspicion of Northern and European capitalists as to the safety of their investments in a slave State, has denied to them the facilities for disposing of their bonds, enjoyed, unfortunately, almost without restraint by Western lines.

It is equally absurd to suppose that railway property will pay fabulous rates of interest in a country where railroad charters can be so easily obtained.

A reorganization of the financial basis of the Companies that have failed to meet their coupons, owing to this false system of credits, (in inaugurating which the bondholders are not free from blame,) appears to be necessary for *their* interests, as well as those of the shareholders. At present these securities are almost worthless in the market, as the purchaser can expect nothing but a long and expensive law suit to secure his legal rights, and but few are disposed to incur this risk.

This reorganization, it seems to me, can only be affected by wiping out all existing mortgages, where there is more than one, and placing a first mortgage or lien upon the road and equipment, for an amount that the Company can at all times readily pay the interest upon—not exceeding one half of the cost of the property mortgaged. The bonds issued under this mortgage to bear six per cent interest, payable semi-annually. All the bonds of the *highest* class, on a process of scaling to be agreed upon (if such is necessary to equalize their original value—the first class to be at *par*) would be converted into this new security. The indebtedness

exceeding the limit of one-half of the actual cost of the road and outfit, to be absorbed by a *preferred seven or eight per cent stock*, which shall be represented in the Board of Directors by one member.

Upon a default of the common stockholders to meet the dividend punctually upon the preference shares, from the net revenues of the Company, the preferred shareholders should elect the Board of Directors, excepting *one member*, who should be elected by the common shareholders to look after their interests.

When the net profits of the Company shall exceed the amount necessary to meet the interest upon its bonds, a sinking fund to be established for the extinguishment of the Company's debt (amounting to at least one per cent upon its indebtedness;) and when such net profits shall exceed the dividend on the preferred stock by two per cent on the common stock (after payment of interest on bonds and sinking fund as above provided) the common shareholders may again elect the Board of Directors—to be lost as before in case of default in meeting the the dividend on the preferred shares.

Legislation will be required to carry out this plan, and there will probably be some difficulty in effecting it. But, through the agency of referees, appointed by some high and disinterested tribunal, all obstacles can be readily overcome; the railroad property of the country will then again be placed upon a substantial basis, and the beneficial effects of this reorganization at once be felt upon all legitimate enterprises. The *preferred shares* issued under this plan would bear a *higher value*, and be much more *esteemed* among substantial capitalists than the lower classes of *bonds* for which they are a substitute. The holder of such stock would have control of the property it represents; and, to a great extent, would be relieved of the apprehension that prior lien may sweep off his security, without an opportunity of protecting it.

In Europe, where Railroad Companies have been limited in their indebtedness that they can incur—(in England to one-third of the cost of the work,)—and compelled to resort to an issue of preference shares to complete or enlarge their enterprises, such an arrangement being familiar to them, will inspire much additional confidence in our railway securities. In all future charters of railroads, these restrictions should be placed upon the right of the Company to issue bonds; and the payment of bonds or stock to contractors for work or materials prohibited.

There have been some well planned railroads ruined by bad management after completion, and others built where there was no sufficient public necessity for them—as there have been houses erected that could not be tenanted, and others that have been sunk by incompetent or corrupt agents. But these are exceptions to rule, and the owners and creditors must suffer in such cases the loss of their investment.

Of the various railroads constructed in this country, none have attracted so much attention as the four great trunk lines between the East and West. The two Southern lines having been built upon a sound financial basis, require no adjustment of their debts. The bondholders of the New York Central Company are equally fortunate. But the New York and Erie Road ventured upon upon a different financial system—the plan we have condemned—and it has sunk under the weight of its debts thus incurred. The discount, shaves, and profits on contracts paid in stock and bonds by that Company, amounted, it is understood, to more than the sum represented by

its capital stock. The large traffic of the road might, however, have sustained this immense indebtedness, had not the legislation of the State of New York been wielded against all railroad lines interfering with the business of its canals. This legislation has fallen upon the New York and Erie Railroad in consequence of the extent of its indebtedness, added to the extra cost of working a broad gauge road, with crushing effect. It has not only ruined that Company, and reduced the value of other competing roads, but it has destroyed also the net earnings of the Canal—and benefited no interest but the farmers and speculators of the Western States. The competition between the New York State Canal and her Railroads could have been easily regulated by such enactment as the State had the reserved power to enforce, and each enterprise under judicious regulations, would thus have received its due share of the carrying trade at fair rates. But unfortunately the more ordinary and simple, yet ruinous plan of reducing tolls to meet competition, was at the instance of the canal carriers and contractors, resorted to—with results known to all.

The New York Central Railroad, having been restricted by the State in its charges on passengers, to the low rate of two cents per mile—a rate that does not afford a sufficient profit to meet the interest upon its stock capital and debt—has been compelled, in consequence of this legislative limitation, to take the freight from the canal, during its navigation, at any rates that would pay cost of transportation,—to obtain revenue and preserve a uniform traffic throughout the year for the machinery required by its winter trade. The small debt of this Company, its more favorable gradients and reduced length of road, added to its large local traffic from the dense population along its line, have enabled it to live through the severe competition waged by the canal interest, sustained, as this competition has been, by State legislation, in the reduction of canal tolls to a mere nominal rate per mile. But it has reduced the Erie Road to bankruptcy.

To establish the credit of Railway Companies—the sound as well as the *unsound*—this reorganization of the character of the indebtedness of the latter, seems to me to be indispensable, and it can not be too early commenced. It will be much better for parties holding a security that bears a higher rate of interest—irregular and uncertain of payment—to exchange it for one as provided under the above plan, upon which the dividend or coupons will be promptly met—and in the possession of which the holder will feel that he has a *bona-fide* interest in the property which it represents.

J. E. T.

READING AND COLUMBIA RAILROAD.—The first annual election for President and Directors of the Reading and Columbia Railroad Company, was held at the public house of John W. Gross, in Ephrata, on Tuesday last, the 1st of November. A number of the principal stockholders were present, and the following ticket was unanimously chosen, viz:

President—Joseph Konigsmacher, Esq.

Directors—M. E. Lyons, Frederick Lauer, Esaias Billingsfeldt, Sebastian Miller, Adam Konigsmacher, Nathan Worley, Joseph Hostetter, Samuel Scoch, A. S. Green, C. S. Kauffman, S. Lichtenthaler, Levi Hull.

The Company is now fairly organized with a good and efficient Board of officers, and we hope soon to hear that a commencement of this new and important railroad enterprise has been made in earnest.—*Reading Gazette*, Nov. 5.

HALF YEARLY EXHIBIT OF THE CENTRAL RAILROAD COMPANY NEW JERSEY.

To THE STOCKHOLDERS.—The Directors beg leave to lay before you a statement of receipts and expenses for the six months ending October 1st, compared with the corresponding six months of 1858; a similar comparison of the coal tonnage; and a condensed statement of the Company's position on the 1st of October.

MONTHS.	1859.	1858.	Increase.	1859.	1858.	Increase.
April.....	\$48,532 18	\$33,972 77	\$14,559 41	\$31,429 94	\$20,007 77	\$11,421 17
May.....	40,480 46	38,701 60	1,778 86	44,191 06	32,928 36	11,262 70
June.....	43,109 38	37,515 53	5,593 85	73,859 99	73,859 99	0
July.....	49,915 58	76,486 13	26,570 55	79,431 72	6,578 42	72,853 30
August.....	47,392 90	44,138 43	3,254 47	77,845 42	12,145 88	65,699 54
September.....	48,538 11	41,308 17	7,229 94	89,846 28	72,028 74	17,817 54
Total, same months.....	\$276,082 90	\$331,429 94	\$55,346 04	\$507,510 84	\$345,473 00	\$162,037 84
1859.						
Receipts for six months.....	\$507,510 84	\$445,473 00	\$62,037 84			
Expenses.....	197,847 76	176,021 46	21,826 30			
Net earnings.....	\$309,663 08	\$269,451 54	\$40,211 54			
1858.						
Receipts for six months.....	\$507,510 84	\$445,473 00	\$62,037 84			
Expenses.....	197,847 76	176,021 46	21,826 30			
Net earnings.....	\$309,663 08	\$269,451 54	\$40,211 54			

Condensed Balance Sheet Oct. 1, 1859.

Railroad, 63 miles, (48 miles being double track).....	\$4,482,372 53
Land and work at Elizabethport.....	167,267 87
Station houses, shops, etc.....	134,700 17
Engines and cars.....	442,700 00
Ferry interest and boats.....	256,450 00
Property accounts.....	141,883 96
Cash balances, etc.....	\$115,644 50
Less accounts payable.....	32,153 36
	\$3,491 11

Total.....	\$5,708,865 64
Capital Stock.....	\$2,000,000 00
Bonds, 1st mortgage.....	1,500,000 00
Bonds, 2d mortgage.....	1,500,000 00
Bills payable and income Bonds.....	321,000 00
Net earnings.....	\$309,663 08
Less interest.....	121,797 44
	187,865 64
Total.....	\$5,708,865 64

The net earnings for the six months are thus shown to be \$309,663 08. After deducting the balance of the interest account, \$121,797 44, there remains as a dividend fund \$187,865 64, equal to 8½ per cent. on the stock. This fund is chargeable with about \$12,000 for half the State taxes, payable in January next, and also with a proportion of any reductions in accounts made at the end of the present fiscal year. Out of these earnings the board have declared a dividend of five (5) per cent. for the six months ending October 1. The transfer books have been this day closed till the 15th of November, and the dividend passed to the credit of those appearing as stockholders at this date.

Before paying this dividend, the Company are bound, by the terms of the Income Bonds,

to provide for the remainder of that series, \$240,000. For this purpose they have resolved to issue \$300,000 of additional stock at par, making the capital \$2,500,000. The terms of issue are contained in the circular of the Finance Committee accompanying this statement. The call of 20 per cent. (\$60,000) made on this stock will be used for the general purposes of the Company, and the remaining calls (\$240,000) will be pledged for the payment of the outstanding Income Bonds, except so far as the same may from time to time be liberated by purchases of said bonds, out of the other resources of the Company.

By order of the Board.

JOHN T. JOHNSTON, President.

No. 69 Wall Street, N. Y., Oct. 31st, 1859.

CIRCULAR OF THE FINANCE COMMITTEE.—To the Stockholders.—By virtue of a resolution of the Board, passed this day, the Finance Committee offer to the Stockholders, at par, three hundred thousand (\$300,000) dollars of new stock, in the proportion of one share of \$100 of new stock for every five shares of old stock. Parties will be entitled to a full share for any fraction. Subscriptions for a greater or less amount may be made, but the Committee reserve the right to distribute the stock not taken by those entitled to the same, in such manner, among stockholders or others, as they may, in their judgment, think best for the interests of the Company.

The allotment will be made at the close of Saturday, Nov. 12th.

An instalment of twenty (20) per cent., with interest at seven per cent. from October 1st to the time when the money is received by the Treasurer, will be payable on receiving notice of allotment. Non-payment of the instalment when due, will forfeit the allotment.

The stock will be entitled to a *pro rata* dividend, from October 1st, with the old stock, but not to the dividend just declared and not yet payable.

The remaining instalments will be called as required; but none are expected to be made for some time.

JOHN T. JOHNSTON,
JOAN C. GREEN,
WILLIAM E. DODGE,
ADAM NORRIS,

Finance Commit.

PUBLIC MEETING.

At a meeting of the citizens of Prince William's Parish, on the 29th of October, 1859, George C. Mackey, Esq., was called to the Chair, and Alex. L. Edwards appointed Secretary. The Chairman having explained the object of the meeting, Col. D. H. Ellis moved that a committee of five be appointed to draft a preamble and resolutions for the consideration of the meeting. The Chair appointed the following named gentlemen to comprise that committee, viz: Col. D. H. Ellis, DeSaussure Edwards, Thos. McTier, Isaac Ellis and Thos. W. Hutson, jr. The committee, after a short absence, returned and reported the following preamble and resolutions:

"WHEREAS, A meeting has been called by our Representatives in the Legislature, to give expression to the voice of the people to remove the restrictions upon the appropriation for the Blue Ridge Railroad, and also as to whether it is expeditious for the State to grant further aid to the above road; therefore, be it

"Resolved, 1st, That, in the opinion of this meeting, it is inexpedient for the Legislature to remove the restrictions, or to grant further aid to the Blue Ridge Railroad.

"Resolved, 2d, That our Senator and Representatives be requested to vote against both the removal and the restrictions, and the grant of further aid to the Blue Ridge Railroad."

After some remarks from DeSaussure Edwards, Esq., in support of the resolutions, the Representatives were called upon to state their reasons for voting in favor of the removal of the restrictions upon the appropriation for the Blue Ridge Railroad. Capt. G. P. Elliott and Wm. J. Gooding both stated very clearly their reasons for so doing, and expressed their willingness to carry out the wishes of the meeting.

The Chair, after reading the preamble and resolutions, submitted them to the meeting, and they were unanimously adopted.

Hon. J. E. DeLoach moved the proceedings of the meeting be sent to the *Charleston Mercury*, and request a publication of the same. The motion was carried. On motion of Col. Ellis, the meeting adjourned.

G. C. MACKAY, *Chairman*.

ALEX. L. EDWARDS, *Sec'y*.

TEXAS AND HER ENTERPRISES.

We see an article in the New Orleans *Picayune* of the 31st ult., under the caption of "Texas and her Enterprises," which fails to give either a full or a correct idea of the progress and enterprise of this State. And as we are so situated, as, perhaps, to give us a better idea of these things than any one else, we will set forth as far as possible in a condensed newspaper article, the present condition and future prospects of the leading enterprises of public improvement, which are at present, engaging the attention of our people. We do this at the risk of repeating some things which we have at one time or another already said on this subject, but we feel assured that our readers will not take it amiss if we do repeat these things now and then. The great and absorbing interest felt by our people in railroads, as well as the interest manifested by the citizens of other States in all that appertains to Texas, renders accounts of these things even new and fresh to them all.

We set out with the idea now, accepted by every body, that Houston is the center of railroads and the center of trade of Texas. Commencing at the South-west, we have the Houston and Brazoria road, running from Houston to Columbia, in Brazoria county, and thence bearing West to Matagorda county, thence North West through the upper part of Matagorda county, and the lower part of Wharton county to Wharton. This road circles through the sugar region of Texas, and opens to our market, a country that now produces 10,000 hhds. of sugar, and 16,000 bbls. of molasses, besides about 10,000 bales of cotton each year, and which is capable of producing quadruple this amount without taxing its resources at all. This road is 75 miles in length, and of it 35 miles are now complete, and about 27 more graded, with iron enough on the ground to take the locomotive to Columbia, 50 miles from this point. In the event the road across Texas and Mexico to Guaymas or Mazatlan should be built, at least 65 miles of this road will form a part of that route, and become the avenue of the world's traffic. It strikes the tide waters of both the Brazos and Bernard, the bars of neither of

which streams are adapted to navigation, and thus renders the whole of that most valuable country accessible.

Westerly from this point is the Buffalo Bayou, Brazos and Colorado road, commencing at Harrisburg, on Buffalo Bayou, but connected with this city by the Houston and Brazoria road, both being of the same gauge, and running to Richmond, thence a little North of West to Columbia, on the Colorado, thence bearing more to the North to La Grange, Bastrop, and Austin, with a road chartered to connect at Columbus with San Antonio. This forms the Great Western road, connecting the vast stock ranges of Western Texas with a market. The production of cotton on the line of this road is now about 90,000 bales. It will do the carrying trade of the beef cattle and wool business of the State, in addition to the vastly increased cotton business which its construction will insure. Of this road there are now nearly 60 miles finished and in operation, with iron on the ground for from five to ten miles further which is already graded. It crosses the Brazos on a low water bridge at Richmond, and the Bernard 20 miles West on a substantial bridge above the highest floods. Should the road across the continent strike for El Paso, this will form to San Antonio an important part of the route.

The next road leaving Houston is the Houston and Texas Central, running from Houston in a course West of North to Hempstead, 50 miles, a town near the Brazos, and thence in a Northerly course through Grimes, Brazos, Robertson, Limestone, Navarro, Ellis, Dallas, Collin and Grayson counties, to Preston on Red River, and thence to connect with the roads ultimately to be built to St. Louis. It also connects in the neighborhood of Collin county with the Memphis and El Paso road, which takes it to the Cairo and Fulton road, at Fulton, or in that neighborhood. This Memphis and El Paso road has about 35 miles graded. The Central is completed to Brazos county, 75 miles, and graded some distance farther. It will do the immense carrying trade of all the cotton region of Central Texas, a region which sent about 60,000 bales over this road last year, and will send an increased amount this year. It will also do the entire trade of the vast wheat region of Northern Texas, a region which now produces, without a market, from two to three millions of bushels of wheat annually, and which will, when a market is opened to it, pour down over this road from fifteen to twenty millions of bushels of wheat per annum, and that too, from forty to sixty days in advance of a supply from any other source. The Central road already with only fifty miles, has done a business the past year of nearly \$200,000. From Hempstead, on the line of this road, puts off the Washington county road to the West, of which eleven miles are completed, and ten more expected to be this fall, taking it to Brenham, the county seat of Washington county, the second richest county in the State. This branch will be extended North-west to Austin, only 80 miles from Brenham, and but 90 miles from the present terminus of this road. Other branches will be built to the Central as fast as it is completed within striking distance of those regions of country so situated as to be able to make desirable connections with it. We should also state that this road will connect with the Southern Pacific Road, if that is built, as we hope it may be, in Navarro county, about 160 miles west of Marshall.

In the North-easterly direction the Galveston, Houston and Henderson road is chartered, commencing at Galveston, thence to Hous-

ton, and thence to Henderson. Of this road, that part between Galveston and Houston will be opened to business it is expected about the 1st of January. Distance 50 miles. Whether any thing more will be done under that charter we can not say, but if not, there will be another charter secured ere many years to connect the great East with this railroad center at Houston. We may suppose that road will run to Huntsville, and thence to Henderson, in Rusk county.

In an Easterly direction is the great New Orleans and Texas road, now chartered all the way from this to Berwick's Bay, and there to connect with the Opelousas road already in operation to New Orleans. On this road a large force is at work, and a considerable amount completed, though we are unable to say how much. This will form a part of the great Atlantic and Pacific road, and with or without that, will become the most important road in the State, connecting us directly with New Orleans, and doing both ways a trade of the vastness of which it is hard to give an adequate idea.

Besides these roads, there is the Southern Pacific road, running from Soda Lake, near Shreveport, to Marshall, 27½ miles, and designed to run West to El Paso and the Pacific; the Memphis, El Paso, and Pacific road, running from Fulton, Arkansas, to El Paso, etc., and of which 35 miles are graded; the San Antonio and Mexican Gulf road from Port Lavacca to San Antonio, of which five miles are completed, and twenty-five miles graded; and the Indianola road, intended to connect with the above some miles above Lavacca, and running from Indianola. Of all these roads active work is being done now on all that connect with Houston, and upon the Memphis, El Paso and Pacific, and the Indianola roads. The others are at present asleep.

We have not space in the present article to show the progress of these roads within a year. It has in the aggregate amounted to about 100 miles of completed road.—*Houston Weekly Telegraph*.

THE PACIFIC RAILROAD.

The last Legislature of California passed a resolution calling a convention to be held at San Francisco for the purpose of giving expression to the wishes of the people as to the location and the necessities existing for the early commencement of the Pacific Railroad. The Territories of Washington and Arizona, and the State of Oregon, were invited to send delegates.

The Convention met in San Francisco on the 20th ultimo, and continued several days. California being well represented, as also were Oregon and Washington Territory—Arizona, alone not sending delegates. From files of the *Herald*, we have carefully noted the proceedings, and hardly know whether to laugh most at the futile attempts of aspiring politicians to make capital out of this great enterprise, or to deplore the ignorance shown by the representatives of California towards the Geography of the country, in the location and practicable working of this great artery of communication, which is yet to be the means of cementing more closely the vast and increasing interests of the people of the two oceans.

Independent of the appointing of committees calling the attention of their representatives to Congress upon matters foreign to the subject, and mutual self-glorification, they did nothing more than the adoption of a resolu-

tion favoring the Central Route. We regret to see this, for although the resolution expresses only the individual views of members supporting it, yet we consider it indicative of the popular sentiment of California. We differ with them entirely—believing the route selected by them impracticable, and that the Southern route is the shortest, cheapest, and best adapted to the purpose on account of the mildness of the climate.

From elaborate surveys, made from time to time, by scientific engineers, chosen from the army, there is no question but that the Central route, if practicable at all, is unavailable a portion of the year. The entire country, through which it passes, is obstructed at times by heavy snows. Stern winter holds control, wrapping in her icy mantle the route from one end to the other.

That the people of California are sacrificing their true interests in ignoring the advantages to be secured in the location of the road on the route known as the Southern one, is too plain to require argument. We have already stated it to be the shortest route of the two, and in the cost of its construction it has great advantages—being the least expensive by far of all the routes in question. It will require less time in its completion, and the people of California in selecting it will be ably assisted, independent of any aid from Government, by the entire South and the Pacific Railroad Company, already organized under liberal provisions and grants of land from the State of Texas.

Are the citizens of California so regardless of what is passing in our midst, as not to realize that the only feasible route for the main trunk of the Pacific Railroad, is the Southern one. A natural road, which has now, for nearly a year, been traveled by the mail coach without the detention of a day. A route capable of carrying the mails, without the aid of steam, from St. Louis and Memphis to San Francisco, in the space of eighteen to twenty days, offers superior advantages to all others, and can be the only true route for this great work.

The day yet will come, if the people of California, in neglect of their true interests, should lend their aid and influence in an enterprise of this vast character, to a route impracticable for a part of the year; if they will stultify themselves, notwithstanding all the scientific information spread before them, in the various surveys made by order of Government in ignoring the advantages of the only feasible and practicable route, they will wake up to find the golden visions and sanguine hopes that have filled the breast of every Californian, but fleeting dreams never to be realized. They will behold other people and other States grasping for that supremacy on the shores of the vast Pacific that might have been their own but for their short-sighted and mistaken policy. The necessities of the commercial world demand that the best route across the continent shall be made available; and the people of California, if they neglect the Southern route, will learn that all the commerce of the Pacific is not confined to San Francisco; they will yet see the people of this section, and the entire South, making strikes for their share of that vast traffic, embracing the opportunities offered in the valuable ports of Guaymas and Mazatlan on the Pacific—either one of which offers equal advantages to that of San Francisco. The fact is beyond proof, that much the larger share of the merchandise of the world would find itself nearer its destination at Guaymas than at San Francisco. This is true of all coming from the Pacific toward the Atlan-

tic, and all destined for Central and South America, and Australia. Anything destined for Asia would be there equally well placed as at San Francisco. It is on the direct route from England to Australia.

We have said enough to convince all that even if California, against her own interest, should refuse the advantages offered in the Southern route, by lending her aid to a more northern one, the demands of the commercial world are such that nothing can interfere with its final success. It is for the interest of the South to build it, and equally important is it to this large section of country, that we should have a commercial city of our own on the Pacific.—*Weekly Arizonian*.

LIFE UPON THE RAILROAD.

There is an old saying that the friendship of a dog is better than his ill will, and for many years in my capacity as a railroad conductor, I have found the above to be true to a letter—but mind, I am not saying that I have no enemies. I undoubtedly, have a few, and I don't think there is a man that lives but has more or less. A little kindness now and then, to the many needy ones, a conductor will find, almost every trip over his road, will not be lost, and he will, in many cases, find from his "bread cast upon the waters," a return four-fold. Yet he must use a great deal of judgment in bestowing his charity upon even those he thinks entirely worthy of such bestowal. I will, in this connection, relate an incident by which a little kindness saved my life, and the lives of all the passengers on board the train.

The Western Division of our road runs through a very mountainous part of Virginia, and the stations were few and far between. About three miles from one of these stations, the road runs through a deep gorge of the Blue Ridge, and near the center is a small valley, and there, hemmed in by the everlasting hills, stood a small one and a half story log cabin. The few acres that surrounded it were well cultivated as a garden, and upon the fruits thereof lived a widow and her three children, by the name of Graff. They were, indeed, untutored in the cold charities of an outside world—I doubt much if they ever saw the sun shine beyond their own native hills. In the summer time the children brought berries to the nearest station to sell, and with the money they earned they bought a few of the necessities of the outside refinement.

The oldest of these children I should judge to be about twelve years, and the youngest about seven. They were all girls and looked nice and clean, and their healthful appearance and natural delicacy, gave them a ready welcome. They appeared as if they had been brought up to fear God, and love their humble home and mother. I had often stopped my train and let them get off at their home, having found them at the station some three miles from home, after disposing of their berries.

I had children at home, and I knew their little feet would be tired in walking three miles, and therefore felt that it would be the same with those fatherless little ones. They seemed so pleased to ride, and thanked me with such hearty thanks, after letting them off near home. They frequently offered me nice, tempting baskets of fruit for my kindness; yet I never accepted any without paying their full price.

Now, if you remember, the winter of 1854 was very cold in that part of the State, and the snow was nearly three feet deep on the mountains.

On the night of the 26th of December, of that year, it turned around warm and the rain fell in torrents. A terrible storm swept the mountain tops, and almost filled the valleys with water. Upon that night my train was winding its way, at its usual speed, around the hills and through the valleys, and as the road-bed was all solid rock, I had no fear of the banks giving out. The night was intensely dark, and the winds moaned piteously through the deep gorges of the mountains. Some of my passengers were trying to sleep, others were talking in a low voice, to relieve the monotony of the scene. Mothers had their children upon their knees, as if to shield them from some unknown danger without.

It was near midnight, when a sharp whistle from the engine brought me to my feet. I knew there was danger by that whistle, and sprang to the brakes at once, but the brakemen were all at their posts, and soon brought the train to a stop. I seized my lantern and found my way forward as soon as possible, when, what a sight met my gaze! A bright fire of pine logs illuminated the track for some distance, and not over forty rods ahead of our train a horrible gulf had opened its maw to receive us!

The snow, together with the rain, had torn the whole side of the mountain out, and eternity itself seemed spread out before us. The widow Graff and her children had found it out, and had brought light brush from their home below, and built a large fire to warn us of our danger. They had been there more than two hours watching beside that beacon of safety. As I went up where that old lady stood drenched through by the rain and sleet, she grasped me by the arm and cried.

"Thank God! Mr. Sherbourn, we stopped you in time. I would have lost my life before one hair of your head should have been hurt. Oh, I prayed to heaven that we might stop the train, and my God, I thank Thee!"

The children were crying for joy. I confess I don't very often pray, but I did then and there. I knelt down by the side of that good old woman and offered up thanks to an All Wise Being for our safe deliverance from a most terrible death, and called down blessings without number upon that good old woman and her children. Near by stood the engineer, fireman and brakemen, the tears streaming down their bronzed cheeks.

I immediately prevailed upon Mrs. Graff and the children to go back into the cars out of the storm and cold. After reaching the cars I related our hair breadth escape, and to whom we were indebted for our lives, and begged the men passengers to go forward and see for themselves. They needed no further urging, and great many of the ladies went also, regardless of the storm. They soon returned, and their pale faces gave full evidence of the frightful death we had escaped. The ladies and gentlemen vied with each other in their thanks and heartfelt gratitude towards Mrs. Graff and her children, and assured her that they would never, never forget her, and before the widow left the train, she was presented with a purse of four hundred and sixty dollars, the voluntary offering of a whole train of grateful passengers. She refused the proffered gift for some time, and said she had only done her duty, and the knowledge of having done so was all the reward she

asked. However, she finally accepted the money, and said it should go to educate her children.

The railroad company built her a new house, gave her and her children a life pass over the road, and ordered all trains to stop and let her get off at home when she wished. But the employees needed no such orders, they can appreciate all such kindness—more so than the Directors.

The old lady frequently visits my home at H——, and she is at all times a welcome visitor at my fireside. Two of the children are attending school at the same place.—*Railroad Gazette*.

GEORGIA.—Of the finances of Georgia, Governor Brown says in his Annual Message last week:

There being a large unexpended balance in the Treasury, after providing for all legal appropriations, including interest upon the public debt, and fifty thousand five hundred dollars of the bonds which fell due during the year, with a view to carry into effect, as far as possible, the objects of the Act, I ordered the Treasurer to give notice, in the public gazettes, that he would redeem, at par, at the Treasury, or in Augusta or Savannah, the bonds of the State not yet due. After several months of advertisement, he was able to find only \$99,250 of bonds not due, which the holders were willing to part with at par. These he redeemed, together with \$1,297, 50 of interest which had accrued upon them, which was not yet due.

As directed by the Statute, I have issued, upon the redemption of these bonds, \$150,000 of new bonds, dated the first day of this month, due twenty years after date, bearing six per cent. interest, payable annually. These bonds are payable to the Secretary of State, as the trustee of the Educational Fund of Georgia, and are deposited in his office; the interest upon which will, in future, be distributed annually as part of the School Fund.

EDGEFIELD AND KENTUCKY RAILROAD.—Col. Cheatham, the energetic President of the Edgfield and Kentucky Railroad, informs us that forty-two miles of his road have been completed. Fourteen miles of the Memphis, Clarksville and Louisville road have also been finished, making fifty-six miles of railroad between Clarksville and Nashville. A connection has been formed between two places with only six miles of staging. The cars commence their regular trips under the new arrangement to-day. We have not yet received the schedule of the time.—*Nashville Banner*, Oct. 31

MILW MISSISSIPPI RAILROAD COMPANY.—The New York *Tribune* of Oct. 31st, states that some of the Stockholders of this Company have commenced suits against certain Directors to recover moneys said to have been received as profits or bonus upon contracts for construction of the road. If the charge can be proved, we trust it will be, and the speculators have an opportunity of boarding at the State's expense for some years, besides being compelled to disgorge every dollar that they have filched from the shareholders. Can not the *Tribune* give the names of the persons who have been guilty. The honest members of the Board of Directors should see that their characters are not tainted by the supposed bad company they are found in.—*American Railway Times*.

ACCIDENT ON A FREIGHT TRAIN ON THE NEW YORK CENTRAL R. R.—ALBANY, NOV. 3.—Between 11 and 12 o'clock last night, a freight train, consisting of 41 cars, ran off the track at the entrance to the city on the heavy down grade, and on reaching the corner of Van Woert street, the locomotive, one of the largest on the road, was overturned, and a general smash-up followed. Eight of the freight cars were shivered to atoms, and their contents scattered about in all directions. The remainder of the train was more or less injured by the concussion. The locomotive was very badly damaged. No lives were lost, nor anyone injured. The accident was caused by ice on the rails, rain having fallen a short time previous and frozen. The train actually ran away from the engineer. All the brakes were down and still the momentum was equal to fifteen miles an hour. The Engineer says, it is fortunate the train ran off where it did, as it would have been impossible to check its headway before entering the passenger depot, where far more serious results would have followed.

VERDICT ON THE ACCIDENT ON THE CHICAGO AND NORTHWESTERN RAILROAD.—WATERTOWN, WIS., NOV. 2.—A coroner's inquest was held this afternoon upon the bodies of those killed by the railroad accident yesterday, and a verdict, that the accident was unavoidable and not the fault of any person in the charge of the train was rendered. It is stated by the officers of the road that great pains have been taken for the purpose of avoiding accidents, and that the fatal train was running at a rate not exceeding fifteen miles an hour.

LOUISVILLE AND NASHVILLE RAILROAD.—The Louisville and Nashville Railroad was opened to public travel last week, and the Metropolis of Kentucky is within eight or nine hours distance of the capital of Tennessee. The whole construction and equipment of the road have been effected in the very best style, and it will compare most favorably with any other Railroad improvement in the country. There thirty-six stations on the route, which are as follows, with the distances from Louisville.

Randolph's.....	6½
Brook's.....	13½
Shepardville.....	18½
Bardstown Branch.....	22
Belmont.....	25
Lebanon Junction.....	29½
Booth's.....	32½
Colesburg.....	34
Tunnel Switch.....	39
Elizabethtown.....	42
Glendale.....	49½
Nolin.....	52
Sonora.....	54½
Upton.....	59
Bacon Creek.....	65½
Mumfordsville.....	72½
Rowlett's.....	75½
Horse Cave.....	81
Woodlands.....	83½
Cave City.....	85
Glasgow Junction.....	90½
Rocky Hill.....	96
Bowling Green.....	113½
Rich Pond.....	119½
Woodburn.....	124
Franklin.....	133½
Mitchellville.....	139½
Richland.....	143½
Fountain Head.....	145½
South Tunnel.....	151
Gallatin.....	158
Pilot Knob.....	164½
Saundersville.....	166½
Hendersonville.....	170½
Edgfield Junction.....	175
Nashville.....	185½

READING RAILROAD.—It is rumored at Philadelphia and generally believed, that Wm. L. HIRST, Esq., is to be the President of the Reading Railroad Company, *vice* R. D. CULLEN, Esq., who is about leaving for Europe.

PITTSBURG AND ERIE RAILROAD.—This road, which commences at Girard, a point on the Lake Shore road, 15 miles west of Erie City, will soon be in operation to Jamestown, Mercer County, 41 miles from Girard and 56 miles from Erie City. The opening of this road will secure to Erie and Buffalo the coal trade and rich products of the Shenango and Conneaut Valleys. During the last two years over the Cleveland and Mahoning Railroad an extensive trade has sprung up between those valleys and the city of Cleveland, which will be lost unless a shorter and more direct line of communication be had to Cleveland, than now exists over the Cleveland and Mahoning. This can be remedied by the completion of the Clinton Railroad from Hudson, Ohio, to Jamestown, Pa., a distance of 53 miles, which is already more than half graded. The Clinton Railroad connects at Jamestown with the Erie and Pittsburgh Railroad, opening north a direct line to Erie and Buffalo, and also with the Pittsburgh and Erie Railroad south to the Ohio river and Pittsburgh.—*Buffalo Courier*.

LEHIGH LUZERNE RAILROAD.—The tunnel and superstructure of this road being completed, it was formally opened for public use on the 20th ult.

The tunnel through Council Ridge is 1,023 feet long, 21 feet wide, and 15 feet high, the natural rock forming the arch, except at the south end, where for 120 feet a brick arch was put in. The grade of the road in the tunnel is 102 feet below the crest of the mountain pierced with the drill and powder blast, to open an iron way from the Hazleton bride-groom train to the bride-bed of anthracite in the basin Black Creek.

The President of the company is Algernon S. Roberts, Esq., a gentleman of practical capacity and thorough acquaintance with the geological formation, physical topography, and mineral resources of the Lehigh region, and who, besides, has a keen insight into the operations of the coal market, into which the Black Creek region is soon to send down an amount of coal apportioned to the general consumption and competing sources of supply.—*Pottsville Mining Register*.

WILMINGTON, CHARLOTTE AND RUTHERFORD RAILWAY.—At the Annual Meeting of this Railway Company held at Charlotte, North Carolina, Oct. 14th, the old board of Directors was re-elected, consisting of the following: H. W. Guoin and C. C. Anderson, of Lincoln; R. H. Cowan, T. D. Meares and A. H. Bokkelen, of Wilmington; J. A. McDowell, of Bladen; R. S. French, of Robeson; W. L. Steele, of Richmond; S. W. Cole, of Anson; S. H. Wal-kup, of Union; L. W. Davis, of Mecklenburg; G. Dickson, of Cleveland; and A. G. Logan, Rutherford. The Board subsequently elected, President, H. C. Guoin; Secretary and Treasurer, Eastern Division, D. S. Cowan; Treasurer, Western Division, V. A. McBee; Chief Engineer, John D. McRea. From the transactions of the meeting we learn that 13 miles of the road are completed, and that the first section of 25 miles will be finished by December 1st. Resolutions were passed to employ a large force to complete the line from Wilmington to a point 50 miles of Charlotte. Great interest is manifested in a speedy completion of the Road.—*American Railway Times*.

There is a New York novelty to be seen in one of our Chestnut street windows, which draws bigger crowds than any organ grinder, without making a quarter of the noise. It is an Ericsson hot-air engine, about as large as a candle box, driven by the flame of two gas burners, and propelling a sewing machine.

PERPETUAL MOTION.—We understand from the New York *Tribune* and other papers, that Mr. James G. Hendrickson, "the inventor of perpetual motion," is dead. Very foolish in Mr. Hendrickson to die; there was not the least need of it; for if he could invent perpetual motion, he could perpetuate his own life; and reading of a very little mechanics would convince him of that. Galvinism, electricity, magnetism, mechanic power, all may be transformed into heat; heat comes from the sun; and when a man can make heat, without using fuel which he consumes in the process, then he can make perpetual motion, and not till then. The perpetual motion will not only go forever when made, but will start of its own accord as soon as the last blow is struck upon it. Inventors of perpetual motion had better read "How's Lives of Eminent Mechanics," and see why time thus spent is wasted.—*Am. Railway Times.*

THE GRAND TRUNK R. R.—That part of the Grand Trunk Railroad between Detroit and Port Sarnia will be formally opened on the 21st inst. Produce from the East, West and South will go through with one transshipment, at Sarnia, the terminus proper of this branch, which is built under a separate management from the main line. The branch is sixty miles in length, and it is to be amalgamated with the main road, so as to form a complete route by rail from Detroit to Portland. The time from Detroit to Portland will be thirty-seven hours and twenty-five minutes, and from Portland to Detroit, thirty-six hours and thirty minutes.

JEFFERSONVILLE RAILROAD.—We learn that the earnings of this road for September were about \$27,000, an increase of some \$6,000 over the corresponding month of the previous year. The opening of the Jeffersonville and Nashville road, which will take place on the 27th inst., must necessarily very favorably affect the earnings of the Jeffersonville road, even, as some predict, to the extent of \$200,000 per year in the aggregate. We doubt whether it will reach that enormous figure, at least for some time to come; but that the Jeffersonville road will reap a large advantage, we have no doubt. The road is in a prosperous condition, with but a trifling floating debt, and a bonded debt of about \$700,000 only.—*Cin. Eng.*

JUNCTION AND BREAKWATER RAILWAY.—The rails for this road are all laid to Milford, Del., and the regular business will soon be commenced. We learn that the Company have contracted with the Philadelphia, Wilmington and Baltimore Railway Company, as lessees of the Delaware Road, to operate their road to Milford, an important point, and one which must be quite an acquisition to the revenue of the Delaware road.

DECISION AGAINST A RAILROAD COMPANY.—A suit to determine the right of way of the Detroit and Milwaukee Railway, between Jefferson avenue and Lafayette street, Detroit, was decided by Judge Green, on Friday, adversely to the railroad. The complainants in the case were the heirs of the Witherell estate, to which the property belonged. The jury rendered a verdict, under the charge of the Court, which decided that the company had no title in the property. They will hence be compelled to purchase an expensive right of way in this locality, unless the decision be reversed by higher Courts.

The earnings of the Michigan Central Road for Oct., 1859, compared with last season, show an increase of \$16,209.

MONETARY AND COMMERCIAL.

The demand for money continues good, and fully equal to the ability of our Bankers to meet. The offerings, although large, are confined to business paper, indicative of a healthy condition of trade. There is still considerable good paper thrown on the street, notwithstanding the efforts of Bankers to accommodate their customers, which they do to their utmost ability, at our previous quotations, 10@12 per cent. Outside rates are a shade higher, 15@18. The opening of the Pork season will put money into new channels and materially facilitate collections and thus reduce the necessities for borrowing on the part of our general dealers.

Eastern Exchange is active at present quotations, but must soon begin to feel the influence of the pork trade.

BUYING.		SELLING.	
New York Sight.....	1/2 prem.	1/2 @ 1/2 prem.	
Boston.....	1/2 prem.	1/2 @ 1/2 prem.	
Philadelphia.....	1/2 prem.	1/2 @ 1/2 prem.	
Baltimore.....	3/4 @ 3/4 prem.	1/2 @ 1/2 prem.	
New Orleans.....	par.	1/2 prem.	
American Gold.....	30@35 prem.	1/2 prem.	

The New York *Cour. and Eng.* of Tuesday says the Bank Statement indicates weakness in the Specie column, accompanied by an expansive movement in Loans. This will not be an acceptable feature to the more conservative portion of our bankers, but will be looked upon favorably by those who are anxious to make better dividends than were reported between January and November, 1859. The changes compared with last week are as follows:

In Loans, an increase of.....	\$1,088,000
In Deposits, an increase of.....	1,006,000
In Specie, a decrease of.....	41,000
In Circulation, a decrease of.....	183,000

The Stock Market opened to-day with somewhat more animation than the spirit evinced at the close on Saturday. The transactions however were not heavy; at the close there was a falling off in prices.

There were sales of United States 6's of 1868 at 108, and Tennessee 6's, 1890 at 90. Virginias at 93 1/2, and Missouri at 84 1/2. Notwithstanding the continued ease in money, the market for State Stocks continues depressed, mainly in consequence of fear that the Banks of Illinois and Wisconsin may be forced to withdraw their circulations this winter and throw large lots on the market.

At the Second Board there were large sales of State Stocks, viz: Missouri Sixes at 84 1/2; Michigan 102; Virginia 93 1/2. The market closes with weak features and in favor of buyers. Compared with Saturdays closing cash prices, we find a decline in Virginia Sixes 1/2, Erie Shares 1/2, Michigan Central 1/2, Cleveland 1/2, Illinois Central 1/2. Panama and New York Central are a shade higher.

The St. Louis *Democrat* remarks that currency is scarce and in demand at only 1/2 discount. It seems to go to the country for Hog and other produce investments as fast as received. In a month or so it will doubtless return in abundance to merchants and bankers.

The earnings of the Lehigh Valley Railroad for the month of September, 1859, were.....47,546 58
September, 1858.....42,062 46

Increase.....5,484 12

FIFTH REPORT OF THE RECEIVER OF THE CENTRAL OHIO ROAD.—H. J. Jewett, Esq., Receiver of the Central Ohio Road filed his fifth monthly report with the United States Court yesterday, from which we take the following figures of the receipts and expenses of the road during the month of September:

EARNINGS.

From Passengers.....	\$33,607 96
From Freight.....	29,359 30
From Express.....	1,211 42
From Mail.....	2,290 60

Total earnings.....33,400 25

EXPENSES.

Transportation Department:	
Passengers.....	\$2,748 46
Freight.....	6,322 27
Fuel.....	5,860 47
	15,934 20
Machinery Department:	
Repairing Cars.....	3,831 98
Repairing Engines.....	5,856 52
	9,688 50
Road Department.....	1,574 25
Construction.....	1,694 90
General Expenses.....	748 76
Total Expenses.....	\$38,640 92

The official October return of the Galena and Chicago Railroad shows as follows:

	1858.	1859.
First week.....	\$40,769	\$55,654
Second week.....	34,187	51,083
Third week.....	30,566	38,360
Fourth week.....	36,179	53,797
Total.....	\$141,652	\$198,834
Increase.....		57,182

The traffic return of the Illinois Central Railroad for October shows a large increase:

1859.....	\$242,348
1858.....	184,776
Increase.....	\$57,572

MICHIGAN SOUTHERN RAILROAD.—The earnings of the Michigan Southern and Northern Indiana Railroad for the month of October were as follows:

	1859.	1858
Passengers.....	\$ 74,313 54	\$96,578 48
Freight.....	128,313 71	93,735 40
Mails.....	4,583 41	4,635 14
Express and Miscellaneous.....	7,258 00	3,248 91
Total.....	\$214,468 66	\$198,215 93
Increase.....		\$16,252 73

GRAND TRUNK RAILROAD OF CANADA.—Audit Office, Montreal, October, 21, 1859.—Statement of Traffic Receipts for week ending Saturday, Oct. 15th, 1859:

Local Passengers 11,159.....	\$16,863 40
Foreign passengers, 2,659.....	5,835 19
Emigrants do.....	650 45
Mails, Express, etc.....	2,349 46
Local Freight and Live Stock 7,987 tons.....	25,594 17
Timber and Lumber 4,327 143 feet, 1,610 tons.....	3,253 94
Firewood, cords 913, tons 1,383.....	10,010 27
Foreign Freight, etc, tons 1,808.....	4,675 58

Total—880 miles.....\$60,032 46
Week ending Oct. 16, 1858—880 miles... 52,965 22

Increase—0 miles.....\$7,067 24

Total traffic from July 1st, 1859, to date.....\$725,350 97
For some period last year.....653,091 55
JOHN HARDMAN, Auditor.

RAILROADS IN VIRGINIA.

Amount dividend bonds due the State.....	\$319,702 00
Payments made by State on ordinary stock.....	13,378,325 54
Payments on account of preferred stock.....	1,241,000 00
Payments on account of loans.....	1,874,333 33
Guaranteed by the State.....	300,000 00

Total amount of State interest.....	18,213,360 87
Capital Stock authorized.....	31,807,013 79
Capital Stock paid in by others than the State.....	9,130,445 84
Capital Stock paid in by the State.....	14,779,324 74
Total amount paid in.....	23,909,770 58

Amount of funded and floating debt:
Funded debt.....\$14,308,784 52
Floating debt.....3,346,964 66

Total.....	\$17,655,749 18
Construction and equipments.....	44,111,989 76
Earnings for the year.....	2,818,298 85
Expenses for the year.....	1,256,167 82
Net earnings for the year.....	1,562,131 03

The earnings of the Grand Trunk Railway of Canada show:

Passengers.....	23,149 04
Freight.....	34,533 96
Parcels, mails, and Sundries.....	2,349 46
Total.....	60,032 46
Corresponding week of last year.....	52,957 21
Increase.....	7,075 21

Opening of the Eastern Route

VIA

"Delaware Cut Off."

SHORTEST LINE TO CLEVELAND.

ON MONDAY, the instant, the CINCINNATI, HAMILTON and DAYTON in connection with the CLEVELAND, COLUMBUS and CINCINNATI R. R. CO., opens its new passenger route to all Eastern points, via Cleveland and Pittsburgh. Trains will leave Cincinnati at 10 A. M., through to Cleveland without change of cars, and 11:30 P. M., Pittsburgh Passenger—change cars at Crestline.

Passengers returning from the East make direct and close connections, both at Cleveland and Pittsburgh, by all trains.

The attention of shippers of Freight from the East is called to this line. LOWEST PRICES AND QUICKEST TIME GUARANTEED. Mark "Via Delaware Cut-off."
D. McLAREN, Sup't.

WHAT RAILROADS CAN DO FOR AN EDITOR.—The *Weekly Southern Standard*, published at Trenton, Tenn., thus discourses on the completion of the Mobile and Ohio Railroad to that point:

Good News.—We are pleased to learn that the track of the Mobile and Ohio Railroad was yesterday thrown across the Ohio river. So the iron will, in a few weeks, really be snorting at Trenton. Then a city—a great big one—will spring up around us; we will wear stere clothes, own a spotted dog, edit a daily *Standard*, and have in it a spicy police report like unto A. Walker of the Nashville *Banner*; we'll do the railroad printing, make a fortune, ride in the cars, drive a fast horse, get a pretty wife, raise a large and respectable posterity, put on city airs generally, and when our "form" is knocked into "ps," the daily papers in our city will be shrouded in black. Come on, you everlasting snorter, we are waiting for you. Ding, dong! Hoot, toot! Buy a morning *Standard*, sir.

GREAT SALE OF RAILROAD LANDS.

40,000 ACRES

Of the Finest Arkansas Lands, at PUBLIC SALE.

Pursuant to an order of the Board of Directors of the Little Rock and Fort Smith Branch of the Cairo and Fulton Railroad Company, made on the 8th day of June, 1859, 40,000 Acres of Land will be offered for sale at the Office of said Company, in the city of Van Buren, Crawford County, Arkansas, on

MONDAY, THE 14TH DAY OF NOV., 1859, and from day to day until sold, being about one half of the lands attached to the First Division of said Road. These lands are advantageously situated upon, and near the Line of the Little Rock and Fort Smith Branch Railroad, which is now being placed in course of construction. They comprise some of the most valuable bottom and uplands in Western Arkansas, and are situated in the Counties of Crawford, Sebastian, and Franklin, and are within twenty miles of the City of Van Buren, and within twenty-five miles of the City of Fort Smith. This Railroad traverses a part of the finest and richest portion of the State, and its completion within five years, will afford railway communication with every portion of the Union. Immigration to this State has been steadily increasing until the better part of the Government Lands are absorbed. The lands attached to this road were selected and confirmed years ago, and are now brought into market for the first time, and present inducements to planters and Farmers desiring to emigrate from the older States, and rare opportunities to Capitalists for safe and remunerative investments. The climate is unequalled by any portion of the Great West for salubrity and health; the soil is remarkably productive, and the country well watered and timbered. The Company are in condition to make good title to the lands now offered for sale.

TERMS.—One third cash; one third in six months; and one third in twelve months; notes to bear interest from date, at the rate of ten per cent. per annum, until paid. Full lists of these lands, and all desirable information concerning them, will be furnished on application, personally, or by Mail, to J. B. OGDEN, Secretary, at the Company's Office, in Van Buren.

JESSE TURNER, President.

Office of L. R. & F. S. Branch of C. & F. R. R. Co.
VAN BUREN, ARK., August 31, 1859. Oct. 20.

WILLIAMS' CINCINNATI DIRECTORY 1860.

OUR Canvassers are now engaged collecting information for the CINCINNATI DIRECTORY for 1860, (Tenth Annual Issue.) The Directory for 1860 will be greatly improved over any former issue. It will contain, in addition to Cincinnati, Directories of Covington and Newport, a complete list of Post Offices in the United States, and many other improvements. It will be issued on the 1st of January. Subscription Price will remain as heretofore, \$2.

C. S. WILLIAMS,
194 Walnut Street.

WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cards for Show Card, Posters, & executed in the highest style of the art.

MIDDLETON, STROBRIDGE & CO.,
119 Walnut St., Odd Fellows' Building

NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith
Branch of the Cairo and Fulton Rail-
road Co., Van Buren, Ark., Sep. 10, '59.

SEALED PROPOSALS for the graduation of the First Division of twenty miles eastward from Van Buren, will be received at this office until **Thursday noon, December 1st, 1859.** The work is divided into twenty sections of about one mile each, and proposals for either a part, or the whole of this Division may be made; but no bids for less than one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise. Estimates of work done will be made on the first day of every alternate month, and payments made on the first day of the month following; and fifteen per cent. of all estimates will be retained until the completion of the contract. Contractors desiring other terms of payment may bid accordingly, as the above terms are not positively settled.

The Company having a large amount of the finest Lands in Western Arkansas, will give preference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications may be seen, and all desired information obtained, upon application at the Engineer's Office, in Van Buren.

JESSE TURNER, President.

NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith
Branch of the Cairo and Fulton R. R.
Co., Van Buren, Ark., Sep. 10, 1859.

SEALED PROPOSALS for the *Masonry* of the First Division of twenty miles eastward from Van Buren, will be received at this office until **Thursday Noon, December 31st, 1859.** No bids for less than the amount of Masonry upon any one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise.

Contractors will state terms of payments, and proportions of money, stock and lands, and amount to be retained by the Company to secure the completion of the contract. The Company reserves the right to reject any and all bids at its option.

Plans and specifications may be seen, and all desired information obtained on application at the Engineer's Office, in Van Buren.

JESSE TURNER, President.

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANA OR SANDOVAL

FOR

Decatur, Springfield,
Bloomington, Peoria,
Burlington, Quincy,
La Salle, Rock Island,
Dixon, Galena,
Prairie du Chien, St. Paul, and
St. Anthony.
And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANA for all the above points.

Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all

TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Ford Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,

Gen'l Southern Agent, Cincinnati.

W. P. JOHNSON,

Gen'l Passenger Agent, Chicago.

MOSELEY'S WROUGHT IRON

ARCH BRIDGES

—AND—

Corrugated Iron Roofs ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.

Spt. 2.

MOSELEY & CO.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the

West, South-West and North-West.

TWO TRAINS

Leave Wheeling daily at 12:35 P. M., and 10:10 A. M.

One Train leaves Parkersburg daily at 9:20 P. M.

Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City. Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2.

Time as quick and Fare as low as by any other ROUTE.

Inquire for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

E. F. FULLER,

General Western Agent.

L. M. COLE,

General Ticket Agent.

W. P. SMITH, Master Transportation.

To Contractors having Capital.

THE MARYLAND AND DELAWARE RAILROAD CO. will receive sealed proposals until the 1st of December for the work and materials of fifty-three miles of Road; extending from its junction with the Delaware Railroad, at Sangena, Delaware, to Oxford, Maryland; forming the shortest connection between Philadelphia and Chesapeake Bay, at a point always unobstructed by ice, near the mouth of Great Choptank River.

The resources of the Company (which is free of debt.) consist of individual stock. State appropriations, and work already done; but they propose to make payment for the work now offered, principally in First Mortgage Bonds; which they are prepared to show will be a safe, interest paying and profitable investment.

Twenty miles of the Railroad are already graded, the entire line located and secured, and the nature of the work very favorable for Contractors.

A circular containing a map and profiles, with descriptions of the character, position, and resources of the road, will be issued about the 25th inst., and sent by mail on application to I. C. W. Powell, Secretary Maryland and Delaware Railroad Co., Easton, Md.; to whom proposals will also be addressed.

Oct. 20.

TENCH TILGHMAN, President.

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circular which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the retort is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet,.....	\$300 00
do do do 350 "	335 00
do do do 400 "	375 00
do do do 500 "	450 00
do do do 600 "	525 00
do do do 700 "	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, as now in operation in several States, apply to

R. T. COVERDALE,

167 Walnut Street, Cincinnati, Ohio,
who has the exclusive right to manufacture and sell in the State of Ohio.
Feb. 24th, 1859.

APPLEGATE & CO.,
Booksellers, Publishers, Stationers & Blank
Book Manufacturers,
43 Main St. Cincinnati, O.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Booksellers,

Country merchants, and others to extensive stock of, our varied and standard, Theological, Scientific, Standard, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the principal publishers and importers of Paper and Stationery, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

BOOKSELLERS,

Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, and Tea wrap-boards, Envelopes, Penholders, Copying Books, Ink and saucers, Sealing Slates, Mutilage, Book rests, Bill envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files; Date Calendars, together with all other articles used in the counting-house.

Stationers,

To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly pagged, including all sizes, from the small memorandum book to the large Super-Royal Ledger, and variety of styles workmanship. order of any design with or without and warranted to in quality of paper and durability of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

BLANK BOOK MANUFACTURERS,

We are prepared to Print and Bind books in any style, at rates as low as quality of work cut in this where. Our executing these the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Card, Circulars, or of printing, will that we do such jobs despatch. Orders re-

Stereotype, of any description that may be desired, can be executed by our facilities for branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Card, Circulars, or of printing, will that we do such jobs despatch. Orders re-

Publishers,

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, *Clack's* Commenmentals, *Relin's* Ancient History, *Plutarch's* Lives, *Josephus*, *Spectator*, *Chain of Sacred Wonders*, *Familiar Science*, *Webb's* Monitor, *Soden's* German, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

43 MAIN STREET, CIN.

W. HARVEY'S SAFETY JOINT For Coupling the Ends of "T" Rail PATENTED, NOV. 2, 1858.

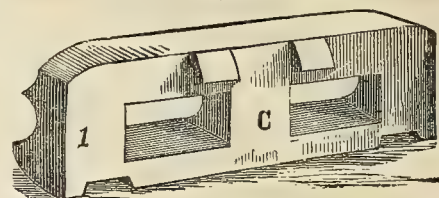


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

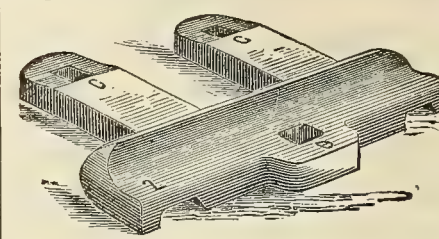
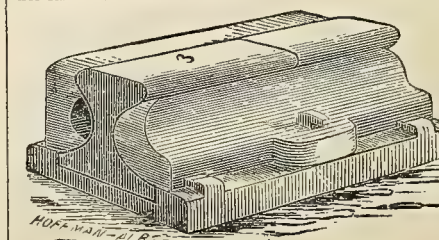


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that on a part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly free road, thereby doing away with the breaking of rails, wheels, and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
41 Jefferson-street, Albany, N. Y.
ON AGENT, Cincinnati, O.

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

SOLE IMPORTERS
PROSSER'S PATENT SURFACE CON-
DENSERS for high pressure steam, with sea or
other bad boiler water, gauges, 3-cutter drills, counter-
sinks, tube end cutting bars, expanders, tube scalers,
steel wire and whalebone brushes, pull lever wrenches,
tubes—plain or enameled, screwed together for Artesian
Wells, Hollow Slabs for various purposes, Steel for
Rollers.
THOS. PROSSER & SON,
97 Jan. 28 Platt Street, New York.

G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

BUSH & LOBDELL,
Wilmington - - - - - Delaware
MANUFACTURERS OF

CHILLED WHEELS

AND

TIRES,
For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent
FOR THEIR

CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE,
WITH OR WITHOUT AXLES.

WHEELS FITTED

To Hammered or Rolled Axles,
In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

an2

A Book for Every Business Man!
JUST PUBLISHED

—THE—

POST-OFFICE GUIDE!
For Post-Masters and Business Men.

CONTAINING

A Complete List of Post-Offices in the United States
and Territories, arranged by States and Counties; A
Complete List of all Distributing Post-Offices; Rates
of Foreign and Domestic Letter Postage; Rates of
Printed Matter, Transient and Regular; Abstract
of the Laws and Regulations of the Post-Office De-
partment, &c., &c.

COMPILED BY E. PENROSE JONES,
Late Assistant Post-Master at Cincinnati.

Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.

U. S. BLANK AGENCY, CINCINNATI POST-OFFICE,
January, 1859.

This work has been carefully compiled and corrected by
E. PENROSE JONES, Esq., late Assistant Post-Master of the
Cincinnati P. O., from the Records in this Department, and
other sources, and contains the most complete list of Post-
Offices, especially of the Western, North-Western, and
South-Western States, yet published.

MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an active pamphlet of about 100 pages.
The entire matter is kept standing in type, and as the com-
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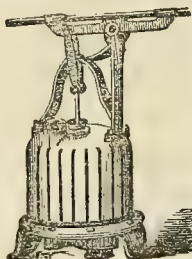
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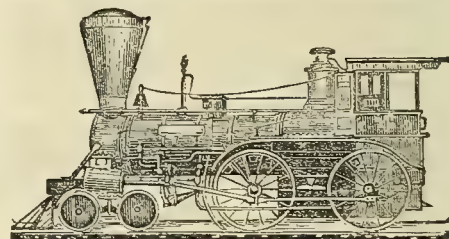
New Time Table

OF THE

NEW YORK CENTRAL R. R.

	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp.	7 00 A. M.	7 40 P. M.	7 00 P. M.
Mail	9 00 A. M.	12 50 A. M.	
New York Exp.	11 15 A. M.	9 40 P. M.	9 00 P. M.
Night Exp.	5 00 P. M.	4 00 A. M.	4 00 A. M.
Utica Accom'n.	6 00 P. M.	Ar. U. 10 00 P. M.	
N. Y. Mail	11 15 P. M.	10 00 A. M.	10 00 A. M.
	Leave Buffalo.	Leave Bridge.	Arr. Albany.
New York Exp.	5 15 A. M.	5 15 A. M.	3 30 P. M.
Steamboat Exp.	8 00 A. M.	8 00 A. M.	8 00 P. M.
Mail			2 30 P. M.
Cleveland Exp.	6 00 P. M.	6 00 P. M.	4 40 A. M.
Cincinnati Exp.	11 00 P. M.	11 00 P. M.	8 30 A. M.
Utica Accom'n.			10 00 A. M.

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P. DUDLEY,
President of the Board,

Jan 5th.

The Railroad Record.

E. D. MANSFIELD.
T. WRIGHTSON. } Editors.

CINCINNATI:
Thursday Morning, Nov. 24, 1859.

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[[The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

Mr. Lord, President of the Indianapolis and Cincinnati Railroad, telegraphs to New York that the business of the road for the second week in November is very heavy, and that the hog movement will soon commodee, when the equipage of the road will not be equal to the demands upon it.

It is stated that not a single passenger car upon the Detroit, Pontiac and Milwaukee Railway has ever been broken up by any accident in a period of twenty-two years. A very fortunate road.

The earnings of the Little Miami and Columbus and Xenia Companies for the first eighteen days of the present month are one hundred dollars per day in advance of the corresponding days of November of last year.

On yesterday the Directors of the Little Miami Company declared a dividend of four per cent. out of the earnings of the six months ending on the 30th inst. The dividend is payable on and after the 5th prox. The transfer books will be closed on the 28th inst., and until December 5th.

The Dalton *Times* of Thursday last informs us that ground was broken for the Dalton and Jacksonville Railroad at that place, on Monday, the 24th inst.

RAILROADS; WHICH OUGHT TO BE MADE.

There are a good many people, in the present period of depreciated Railroad stock, who think there are no Railroads making, and none will be made. This is a great mistake. Railroad construction is going on nearly as rapidly as ever; but it is mostly confined to the Western, or new States, Iowa, Missouri, Wisconsin, Texas, Louisiana and Tennessee, and now beginning, California, are all engaged in making Railroads, and the aggregate miles constructed for 1859 will be quite large. The construction of Railroads is a positive necessity for the new Roads. They cannot get along without them, and if they would drag along with depreciated property and crops, which, however heavy, cannot be carried to market, they must make roads. If they would have lands raise, or towns grow, or produce valuable, they must make Railroads. This is the necessity of the new States. We would here, however, note briefly some works which ought to be made immediately, in the interior:

1. First among these works, in magnitude, importance and value, is the connection between Cincinnati and the Tennessee and Southern roads. It is one among the remarkable things in the history of the Iron Roads, that their great and most important object should remain to this day unaccomplished. We have often referred to this subject, and shall do so again. The plan of a Railroad from Cincinnati to Charleston, S. C., was formed and advocated by Dr. DANIEL DRAKE and EDWARD D. MANSFIELD, as early as in 1835, and in 1836, on the fourth of July, a large Convention assembled at Knoxville, to aid and form the construction of the Cincinnati and Charleston Railroad. The Convention was composed of some of the most eminent men in South Carolina, Georgia, Tennessee, Kentucky, Ohio and Indiana. The result was a strenuous effort, on the part of both Georgia and South Carolina, to reach the Tennessee line, and then the Ohio River. In consequence of this, Georgia constructed her Central Road, and South Carolina commenced her Blue Ridge Road, which is yet incomplete. The system of Georgia roads is at length completed to Knoxville, via Atlanta, Dalton, &c. The Georgia roads also connect with all the South Carolina roads, so that actually there is a system of Southern roads amounting to about 4,000 miles, turning upon Knoxville, as a pivot, and which, if connected with the Northern roads, would complete a vast circle of Iron Roads, centering at Knoxville, and ramifying through ten or twelve States, extending from Lake Erie to the Atlantic. On the Northern side, the main link has advanced from Cincinnati to Nicholasville, Ky., 111 miles. What then remains to be done? From Knoxville to the Cumberland Mountains, about 45 miles, a road is in course of construction by

a Tennessee Company, who with State aid for bridges and \$10,000 per mile, has the ability to finish it. The great difficulty, and about the only one, in the way of this immensely important work, is that the State of Kentucky gives no aid, and the counties through which it passes are poor. There is, therefore, no money *bonus* on which to raise the means. There may be found means, however, under a law of Kentucky, which authorizes the counties to assess themselves for the construction of works of improvement within their own borders. The counties which lie between the Cumberland Mountains and the Kentucky River, are, however, not very populous, and possess little wealth. Hence they feel little disposed to undertake so great an enterprise. But if the great Railroads on either side, and the great State of Kentucky, now lagging behind in the race of improvement, should view this object in the light which intelligence demands, the work would be easily accomplished. Let Kentucky do what Tennessee does, lend the road her bonds for the iron, \$10,000 per mile, and the counties assess themselves to an equal amount, and the money would be easily raised. The distance between the Kentucky River and the Cumberland Mountains is only 100 miles: This lies in five counties, which, by an assessment of \$200,000 each, could furnish \$1,000,000. If the State of Kentucky would endorse the bonds of the road for \$1,000,000 more, the whole capital would be easily raised. (say \$4,000,000) for other Companies and other capitalists would furnish the residue.

2. Another Railroad which *ought* to be made, we have also referred to. We mean the Cincinnati and Mackinaw—the Northern part—for all South of Fort Wayne may be regarded as complete, (*so far*, only, we mean,) as that corn can pass from Fort Wayne to Cincinnati via other roads to Dayton. To the Michigan part of this road, being two branches from Mackinaw south, the United States Government has granted large tracts of land. We do not know what condition the enterprise is in, but the lands will be eventually available to a very large amount. If this were made, there would be no obstacle in the way, but the link we have already spoken of in Kentucky, between Lake Huron and the Atlantic, or the Gulf of Mexico. Such a line of Railroad, running through *twenty degrees of latitude*, and having on its own borders every product, from sugar and rice to corn, wheat, fish and ice, would have advantages for carrying on an internal commerce not surpassed by any other in the world.

3. Last and greatest of all (for the present) is the Pacific Road, upon which our readers well know we have written much. We are not wedded to any particular route, although we well know that the Texas-Pacific will be made first; at least as far as the Colorado, which will furnish a steam connection with the Pacific. This will be the case unless the Texas land grant fails, as some say it must. But

whether that be made or not, the Missouri-Pacific must be continued through Kansas, and in the neighborhood of the Mines. The great Central Route to the Pacific will and must be made. It is of incalculable importance to the nation, and to the commerce of the world.

VIRGINIA AND TENNESSEE RAILROAD COMPANY.

From the President's Report, and the accompanying reports of the General Superintendent and Resident Engineer, as well as various tabular statements, the following facts are taken:

The gross earnings of the road were.....	\$672,894 51
Less, expense of operating.....	394,185 44
Net gain.....	\$278,709 07

The earnings of the road are *two hundred and four thousand seven hundred and three dollars and eighty-seven cents* more than the year next preceding,—being an increase of upward of *forty-five* per cent., and exceeds the estimate made by the Board of Directors in their last report by *twenty-two thousand eight hundred and ninety four dollars and fifty-one cents*.

The expenses of operating were *fifty-eight and a half* per cent. of gross receipts, which, however, includes many items which if compared with former years, would be termed *extraordinary expenses*, consequent upon the unusual number of slides, &c., &c., the effects of the extreme wet weather during the winter and spring months. This is clearly shown by the great increase of material train service, which was nearly six times greater than the year previous.

The rate of expense to gross receipts, however, is not the only or even proper criterion by which to judge of the economy of working; nor indeed is it reliable in that connection. It is, however, a pretty sure indication of the prosperity of a road, evidencing the full or partial employment of the motive power and trains necessarily to be kept in motion.

The cost per mile run is the surest guide, but a combination of all the usual tests is essential to a correct opinion.

The net gain is about *four* per cent. on the Road, and upward of *two* per cent. upon the capital stock, after deducting *six* per cent. interest on the funded debt of the Company.

The receipts per mile of Road, and per mile run, were nearly *forty-four* per cent. greater than the year previous.

The net gain per mile of Road was about *twenty-five* per cent. in excess of the year previous, and the net gain per mile run, upward of *fifty-three* per cent.

The aggregate increase of tonnage was upward of *fourteen* per cent. The increase *Westward*, or import tonnage, shows an increase of *three and a half* per cent. and the *Eastward*, or export tonnage, nearly *twenty* per cent. increase.

The average distance each ton was moved was *fifty-nine* per cent. of the length of the entire Road, or one hundred and twenty-one miles; being an increase upon the year previous of *sixteen* per cent.

The average rate of freight was some *twenty* per cent. less than the year previous. The yield, however, or actual receipt for each ton, was about *five* per cent. more.

The whole movement of tonnage was *sixty-nine* per cent. *East*, and *thirty-one* per cent. *West*. The mileage or tons carried one mile, was *seventy-five* per cent. *Eastward*, and *twenty-five* per cent. *Westward*. The preponderance, therefore, was *thirty-eight* per cent in tonnage, and *fifty* per cent. in mileage *Eastward*.

The number of tons passing over each mile of road was.....	33,525
And the number of tons furnished by each mile was.....	272

In comparing the several divisions or classes of the various products, it will be observed that the *Products of the Forest* have decreased in quantity *fifty-seven* per cent.; and of *Manufactures sixteen* per cent. The *Mines* show an increase of *twenty-seven* per cent.; *Animals fifteen* per cent.; *Agricultural and Vegetable, twenty-six* per cent., and *Merchandise fifty-eight* per cent.

The average distance each division was moved, as compared with 1858, is as follows:—

DIVISIONS.	1859.	1858.
Forest, (Products of) miles.....	64.0	30.2
Mines, do.....	89.1	92.6
Animals, do.....	103.4	140.4
Agriculture, do.....	71.3	84.1
Manufacture, do.....	165.0	123.3
Merchandise, do.....	133.5	125.3
Vegetable, do.....	148.0	111.0
Miscellaneous articles, miles.....	90.0	87.7
Average movement Eastward, miles.....	130.0	93.0
Average movement Westward, miles.....	98.0	125.0
Average movement both ways, miles.....	121.0	108.0

The average cost of handling tonnage at the several depots was *twenty-four* cents per ton.

The passenger business shows a handsome increase—say, movement *West, forty-three* per cent.; *East, twenty-one* per cent.—and both ways *thirty-two* per cent.

The *Way* travel increased *five* per cent. and the *Through*—an average of *three hundred and twenty-three* per cent.—the movement *Eastward* being an increase of *one hundred and eighty* per cent.; and *Westward five hundred eight* per cent.

The mileage of passengers, or the number of passengers carried mile, exhibits an increase, of *Way, five* per cent.; and of all kinds *nine hundred and two* per cent.

The average miles traveled by passengers, were *forty-six* per cent. of the whole Road, or ninety-four miles; and per each mile of Road an increase of *twenty-nine* per cent.

The receipts from passengers increased upwards of *eighty* per cent.; and whilst the rate per mile was *ten and a half* per cent. less than the previous year, the yield of each passenger was *thirty* per cent. greater.

The increase of mail-pay was nearly *thirty-six* per cent. and of the express business *two hundred and twenty-five* per cent.; and the in-

crease from all sources, on the passenger trains, *seventy-six* per cent.

The number of passengers transported over each mile of Road was.....	43,372
And for each mile of Road.....	611
Miles run by engines for each mile Road.....	1,861

The increase of passenger train service was nearly *sixteen* per cent., and the freight train service shows a decrease of *four* per cent.

ROAD AND MACHINERY.

The Road bed, bridges, machinery, &c., are in excellent order, as you will find stated in detail in the reports of the General Superintendent and Resident Engineer, and of whom it affords the Board pleasure to be enabled to speak in terms of the highest commendation,

During the year it was found expedient to make additions to the buildings, motive power rolling stock, &c.,	\$10,493 55
Eleven locomotives.....	162,059 89
Rolling stock.....	76,875 00
Total.....	\$189,428 44

There was also several turn-outs or sidings put in, and turn-tables erected.

The purchase of motive power was rendered necessary from the character and condition of the stock and the increasing business of the Road, many of the machines being too light for the service required, and the movement of tonnage at some periods being very heavy, beyond the capacity of Company to move it as promptly as it should be done. The present *equipment* is regarded sufficient for a greatly increased business upon the present regular requirements, and it is expected that there will be no necessity for further expenditures under this head for some time to come.

The entire cost of the Road, to 30th June last, is *seven millions one hundred thousand five hundred and twenty-seven dollars and seventy-four cents*.

RAILROAD ELECTION.—The following is the result of the election held in this county yesterday, on the proposition to authorize the County Court to take one hundred thousand dollars' stock in the Platte County Railroad, to-wit:

	For stock.	Against Stock.
Savannah.....	775	235
Whitesville.....	5	132
Amizonia.....	1	180
Hallsburg.....	4	36
Rochester.....	—	—
Fillmore.....	120	16
Ogel's Mill.....	2	11
Total.....	908	706

The foregoing table exhibits the entire vote of the county, except Rochester township, which will probably give in the neighborhood of two hundred votes against the stock. We think it safe to say, that the stock has been voted by about two hundred majority. All honor to Fillmore and Savannah; they have almost solitary and alone beaten the united efforts of the balance of the county. Three times three cheers for glorious little Fillmore!

Later.—Since the above was in type, we have received the votes from Rochester, which stands 1 for the stock and 235 against it; making the official majority for the stock, 64 votes. Old Fogysism is at last overpowered, and it is hoped that Andrew is now fully redeemed from its baneful influences.—*North-West (Mo.) Democrat.*

(From the Hamilton Spectator.)

GREAT WESTERN RAILWAY OF CANADA.

SIR:—The subjects discussed in relation to this Railway, in a pamphlet recently issued in England, entitled "A few facts relative to the present position and management of the Great Western Railway of Canada," are not likely to loose their interest for some time to come, with the English shareholders. I therefore solicit the favor of briefly alluding through your columns to Mr. Brydges' remarks, at the late meeting of Great Western of Canada shareholders at the London Tavern, upon the pamphlet in question in connection with my name. In a communication addressed to a Canadian journal, containing a lengthy report of Mr. Brydges' speech, I have already replied somewhat in detail, and given him credit for his acumen in having charged me with the authorship. You will perceive by my reply to Mr. Brydges' speech, a copy of which I send you, that I have acknowledged having supplied the information and data, which enabled my friends in London to issue the pamphlet.

The first thing that I desire to notice in Mr. Brydges' remarks upon the pamphlet, is his ingenious method of invalidating the force of the facts and deductions it contains. In the first place it is an anonymous production, and therefore not entitled to weight, or consideration; and, secondly, it was written by a person who was not a shareholder, and who consequently had no right to intermeddle with affairs of the Company.

With regard to the anonymous character of the production, I have to say, that not being on the spot, I could not judge of the propriety, or impropriety, of withholding my name. The gentlemen who supervised its publication, considering that nearly all the facts discussed were, either drawn from the Directors' Reports, or were extracted from authentic documents, particularly mentioned and referred to, by page, or paragraph, felt it to be quite unnecessary to accompany it with the names of those who compiled it. My friends, in fact considered that the giving the author's name could add nothing to the force of facts and citations which seemed to carry their own evidence of truthfulness. So much for the argument respecting the anonymous nature of the "tract," as Mr. Brydges contemptuously styles it. I might add, that no one knows better than Mr. Brydges, that is customary in England as well as in America, for the writers of articles in newspapers and pamphlets, reviewing the reports of Railway and other companies, not to indulge in the vanity of appending their names. Had my friends adopted this course in the present instance, I should have been charged by Mr. Brydges with vanity, egotism and a desire for notoriety, &c., &c.

Now, with regard to my not being a shareholder, and consequently not having a right to offer an opinion upon or criticize the Great Western management, that is a matter upon which I claim the privilege of differing from Mr. Brydges. There are many reasons why I have just as good a right to be heard through the medium of the Press upon this subject as Mr. Brydges himself. In the first place I am an old editor, and editors are very apt to consider all questions relating to the management of Railways—legitimate matters for public discussion. Secondly, I was for a great many years one of the early promoters of this line of Railway, and wrote many articles and statements which were pretty extensively circulated, both here and in England, prior to the raising of the first capital applied in its con-

struction. Thirdly, I am a heavy rate-payer in the city of Hamilton, which holds \$50,000 of the shares of the Company, and the non-payment of dividends through mismanagement, or any other circumstances, adds 8 or 10 per cent to my taxes. Fourthly, when in England in 1854, I induced a number of my friends to invest considerable sums, both in the shares and bonds of the Company. Fifthly, I have been constantly in the receipt of letters from England, from shareholders, asking for information the management and prospects of the Company, and complaining of the absence of details in the directors' reports, to which I have been unable to reply, except briefly. These are the grounds upon which I rest my right to discuss all questions relating to the affairs of this Company.

According to the report of Mr. Brydges' speech at the London Tavern, published at length by Directors' organs, here, that gentleman has only taken *direct* issue upon two of the statements which he alleges to be contained in the pamphlet. The first of these was the assertion made in the pamphlet that the Company owed a large sum to its Bankers, for which a high rate of interest was paid. This, Mr. Brydges declared had originated, entirely in my "fertile imagination," or in words was untrue. Now, by reference to page 13 of the pamphlet, it will be seen that a note is appended giving the page and account in the Directors' Report upon which this assertion was founded. Why did not Mr. Brydges explain what the following conglomeration of items at page 9, under the head of "General balance sheet to July 1859, account No. 4" of the last Directors Report means?

"Balance due to Bankers, Contractors, and sundry accounts of the half year, not paid on the 31st July, 1859, (less amount of Engineering per centages reserved) £208,499 8s. 11d."

One would think that some shareholder would have asked Mr. Brydges to have dissected this grand item, which is about 7 per cent of the whole paid up share-capital, instead of receiving his denial as gospel. Such, however seems not to have been the case. If the Commercial Bank of Canada will corroborate Mr. Brydges' denial, and that gentleman will condescend to explain the item quoted, then I shall be compelled to admit that I have been misinformed in setting down nearly the whole of the two hundred thousand pounds sterling, as borrowed from the "Company's Bankers," at a high rate of interest.

The next point upon which Mr. Brydges takes direct issue with me, is upon an alleged charge, that the Directors were in the habit of letting contracts "without putting them up to tender." He then is reported to have said, that "he must ask the proprietors to accept his distinct denial of the charge, which was at least equal to the statement of Mr. Wilson." Now it will scarcely be credited that all this flourish of trumpets relates to a purely imaginary allegation, and that no such charge was ever preferred by me. On the contrary, I know very well, that the Directors always go through the farce of advertising for tenders, and as invariably let the work to the same person, who is known here and in Michigan as the Great Western "set contractor."

As to other points discussed in the pamphlet, to which Mr. Brydges referred *seriatim* in his speech, he has thrown upon them no additional light, and has admitted the substantial correctness of the facts supplied by me. He admits that the Michigan Directors had jobbed largely in contracts on the main line of the Detroit and Milwaukee Railway, and by his silence also admits that the Port Huron and Owosso

branch, for which he is now arranging to raise capital from the Great Western Shareholders and the English public, is still under the control of the same set of jobbers. He admits that the Great Western capital account has been increased by three million four hundred and sixty-nine thousand dollars, over the sum fixed for it by himself and the Board in 1856, and accepted by a resolution of the proprietors as a *final limit*. In fact he has paid a high compliment to the truthfulness of the facts supplied by me for the London pamphlet, and I have received several very flattering and gratifying letters from English Shareholders in consequence of the "honorable mention" which Mr. Brydges has made of my name.

I must trespass a little more on your space to notice the allusion made by Mr. Brydges, in his speech, to a pamphlet which I published in England in 1854, entitled the "The Great Western Railway." The discrepancies which Mr. Brydges alleges to exist between my views, then and now, are that I then spoke favorably of the Detroit and Milwaukee line as a feeder to the Great Western. So I did, and so I do now; and I still affirm, as I then did, that had that line been built at the cost then contracted for—namely, about five millions and a half of dollars, it would be a good paying line. I can not for the life of me perceive the discrepancy out of which Mr. Brydges has endeavored to make so much capital, between my statements of 1854 and 1859. The pamphlet of 1854 was published mainly to prevent the policy of the Canadian Board, to construct a number of short cross lines as "feeders to the main line" being carried out. This policy, absurd as it is now admitted to have been, was imputed to Mr. Brydges, and was, at any rate, endorsed by him in the Directors' Report for that year. Instead of building these branches, some of which, such as the Galt and the Sarnia, have actually been built to the sorrow of the Shareholders. I advised the construction of a short parallel line from Chatham to the Falls of Niagara, which would obviate the necessity of laying a double track on the main line, and run in the right direction of traffic—namely, East and West. It would, besides, have opened up a fine tract of country, much superior to that on the Sarnia Branch, which is mostly a dead wilderness. My views were highly approved of by Mr. Samuel Laing, the Company's then Chairman, who read my pamphlet. Happy would it be for the Great Western Shareholders, at this time, had they then acted upon my suggestions, and let the non-paying branches, which the Directors have since hoisted upon them, alone. You will see the subject of the Michigan line more fully dealt with in the article which appeared over my signature in the Canadian papers. I shall therefore not trespass further upon your space, than to warn you against being led away from the real issues raised, by the false and malicious attacks made upon myself personally, in one or two scurrilous prints in London, which receive their inspiration from Great Western official resources. It is a very common method for those who can not rebut facts, to draw off public attention by creating other and false issues. Let any one interested, calmly and dispassionately read the pamphlet, rightly imputed by Mr. Brydges to me, and it will be seen how little has been left to be taken upon the mere assertions of the writer.

I am, Sir,

Yours, &c.,

H. B. WILSON.

P. S.—Since the above was written the annual meeting of shareholders, required by the Company's charter to be held in this city, has

taken place, and has elicited, from Mr. Reynolds, the Financial Director, a statement entirely at variance with the one made by Mr. Brydges, the Managing Director, at the meeting in London, respecting the indebtedness of the Company to its Bankers. I will quote the exact words imputed by the reporters the respective gentlemen. Mr. Brydges said, "The next point to which Mr. Wilson alluded was as at page 13, (of the pamphlet), where it was said the Company owed a great deal of money to its Bankers. That was a statement originating entirely in the fertile imagination of Mr. Wilson." This is a polite method of giving me the lie direct. Now for his colleague's reply to the same point, raised by Mr. Gourlay at the meeting here on the 1st inst. Mr. Reynolds said—referring to the accounts of the half-year ending 31st January, 1859,—“There was £159,573 sterling due “to the London Joint Stock Bank.” This sum he afterwards states, had been reduced to £140,743. It also appears from Mr. Reynolds' statement, that the Company had at its credit at the Commercial Bank on the 31st January last \$66,880, but at the end of the last half-year only £2,538. I leave these discrepancies to be explained by the gentlemen themselves. Mr. Brydges may say that Seven Hundred and Fifty Thousand Dollars is not “a great deal of money,” but this I apprehend will scarcely be regarded as satisfactory to those shareholders who counted upon a dividend as a means of subsistence. It is a sum sufficient to have paid the shareholders a dividend at the rate of 10 per cent per annum. The public will now know how much value to attach to the most solemn asseverations of Mr. Brydges.

Yours, &c.,
H. B. W.

HAMILTON, Nov. 3, 1859.

SUNBURY AND ERIE RAILROAD.

The departure of Mr. Wm. Moorhead, President of the Sunbury and Erie Railroad, and Mr. Charles Gibbon, Solicitor, for England, has been noticed. They go to negotiate three and a half millions of five per cent. bonds, which shall be one moiety of a mortgage of seven millions on the road. The other moiety is in possession of the State, as consideration for the canals sold to the Railroad Company. These canals, it is well known, had long stood between the State and solvency. They had been made an engine of corruption by different State Administrations, and were continually sinking the Commonwealth more deeply in debt. The sale of these works was a measure carried through the Legislature by the friends of reform, but was strenuously opposed by the leeches of the public treasury and their favorites. The main line of the public works was sold, in spite of the efforts of certain Democratic office holders and others, and the State relieved of that incubus. Then the canals were disposed of to relieve the State of their ruinous charge, and also for the purpose of assisting to complete the Sunbury and Erie Railroad, a work which is to open up the vast resources of a rich portion of the State.

The benefits that will accrue to Pennsylvania by the completion of this road are incalculable. It will give us the most direct route between Philadelphia and intermediate points on the road and the Great Northwestern and Lake Shore country. It will furnish railroad communication for a number of towns and a large territory that now takes its trade and produce to towns on the line of the New York and Erie Railroad. This trade, which has been given

to New York ever since the completion of the latter road, is enormous, and is well worth an effort on the part of Pennsylvania, and particularly of Philadelphia capitalists to secure. The completion of the Sunbury and Erie, and connecting roads, will secure the greater part of that trade which now goes to that city and State, to Philadelphia and Pennsylvania. It is this fact that makes New Yorkers so bitter against the road, and so excited when a prospect appears of its completion.

The New York *Herald*, speaking of Mr. Moorhead's mission to England, shows where the soreness is, and how much the fear in New York that the necessary funds will be obtained to complete the road. There is no doubt that the enterprise will soon be completed, even without the desired assistance from abroad, though it would somewhat delayed. It is nearly finished now. The road is open to Warren city on the Western end, and some distance above Lock Haven on the Eastern terminus. Besides this, a great amount of work has been done on the intermediate line. Its early completion is very desirable, and for this reason we hope Mr. Moorehead's mission may prove successful. The *Herald* plainly endeavors to frighten English capitalists from investing in the bonds of the road; but they may be assured that any investment in the stock of the Sunbury and Erie will be both safe and profitable. The example of the New York and Erie is no criterion by which to judge of the success of this road; for, unlike that, the Sunbury and Erie will have no road to compete with it, in some most important respects, but will compete successfully with previously established lines to the West. Let it be completed, and that speedily, and it will be seen if we are not correct in our estimate of its profit and importance.—*Penn. Eng.*

COMMERCE OF THE PACIFIC.

The progress of affairs in the Asiatic seas is of a nature to open there a broad field for the employment of American shipping. It has always been the case that when American shipping came in competition with that of other countries on the same footing, it has occupied the whole ground; and in the ports of Asia it has a field for operation of the most favorable description. According to the last accounts from China, the American Minister had been received at Peking with great favor, which affords the most favorable augury for the future of American interests as connected with that Empire. The recent advices from Europe are also of great lukewarmness on the part of the French in relation to the Chinese quarrel. The English has also become less vindictive against John Chinamen, in face of the war clouds that lower on the Continent; and the expedition talked of may be long delayed, if not altogether abandoned; leaving the English interests there in the position of a conquered and repulsed enemy, while the Americans enjoy high favor. Such a position, if properly treated, can not but result in conferring upon American interests a high degree of prosperity. As a favored nation in Chinese ports, the great and growing carrying trade between the countries of British India and China, as well as of the Isles of the Ocean, must fall to its share. A political position so favorable, supported by the great and well known advantages which the American vessels possess in sailing qualities, will give them the trade of 600,000,000 people. The facilities of California for ship building are well nigh inexhaustible, and the increasing population of that coast are already making them

available. The American shipping interest on the Pacific Coast is doubtless destined to exceed that of almost any other, not only by reason of the carrying trade which Australia, China, Japan, India, the Amoor, and South America, offer to American bottoms, but in the outlets which railroads across the country to the Atlantic States will promote. It will not be long before the telegraph coming from Russia, by the Amoor River and Behring's Straits, will connect with the American line in the Oregon territory. The connection of this means of prompt communication, showing the state of the markets at almost all points of the world at once, will give a new impulse to operations of shipping; and American genius may, from San Francisco as a central point, command the whole carrying trade of all those countries that border the Pacific Ocean, and which produce those raw products that are rapidly becoming the sole medium of exchange between the countries of Europe. It will be a long time before those vast regions will have a home market for the produce of which they are so prolific. Every movement thus far towards the improvement of India, or the “opening up” of China, has only tended to a larger demand for goods in that region, and more extensive export of produce not only to Europe, but between the countries of Asia. The extent to which that commerce may be pushed is hardly to be estimated, and its whole future marks but the limitless demand that may be made upon American shipping. The future commerce of the Pacific will, within fifty years, far exceed that of the Atlantic Ocean hitherto, and it is quite probable that screw steamers are to be the chief mode of construction. The Americans can have few competitors as naval constructors in those countries, and none can command more facilities of construction. Hence the appearance of the Americans upon the Pacific Coast is as the future commercial masters of more than half the human race, who encircle those seas. They possess great wealth, and great industry, and skill of all description, except that of a nautical character, and it is precisely that which it is the “manifest destiny” of the United States to supply and exercise.—*Economist*.

FLORIDA RAILROAD.—The work of track-laying on the Florida Railroad is progressing finely. More rolling stock will soon be there. Travel and business on the road is rapidly increasing, and everything betokens the eminent success of that great work. We are pleased to learn, too, that the Central Road is now in successful operation to a point (the Olusta) within twelve miles of Lake City. The final completion of the Central Road we look forward to with almost as much interest as we do that of our own. A direct and speedy communication between Middle Florida and Fernandina is as much desired by the people of the Middle district as by our own citizens. In fact, we desire to see all our State works of internal improvement completed speedily. By the way, can anybody inform us how the proposed Indian River and St. John's Canal is progressing? We are equally as solicitous for the completion of that important commercial channel as we are for the residue of our public improvements. We are aware that the canal is in the hands of an able and efficient Board of Commissioners, and we presume they are progressing with the initiatory steps of the work. We hope soon to hear that the contract is taken.—*Fernandina Floridian*, 10th.

THE PACIFIC RAILROAD.

Let us look at the effects on Imperial interests of a railway from Halifax to Vancouver. Does any one imagine that the San Juan affair would have happened if such a road had been in existence? Does any one imagine that England, hastening to punish the treachery of the Chinese, would not be able to accomplish her purpose with greater ease, rapidity and economy, were there a trans-continental railway? There have thus occurred two occasions, within six months, on which a Pacific Railway on British soil would have been of material advantage to the Empire. Such times must in the nature of things, be always occurring. European interests on the Pacific are now of such magnitude that it is of the utmost importance to the leading nation of the old world to have speedy communication with that ocean, not likely to be interrupted.

Even supposing that Britain will always be at peace with the rest of the nations, and at liberty to persevere in her grandest work, that of colonization, spreading her people, her language and her civilization over the world, will it not be of the utmost importance that a grand line of railroad shall connect closely with herself her seven colonies in this northern region—Newfoundland, Nova Scotia, New Brunswick, Prince Edwards Island, Canada, Red River, and British Columbia—besides giving her easy access to Australia, Hong Kong, and the various Islands she possesses in the Pacific?

We will express an opinion, which we think can be sustained, viz: that if these Colonies are to remain British, there must be a Pacific railroad built there. We take it for granted that, ere long, there will be railway communication between the two oceans, somewhere. Suppose it on American soil, running from New York to San Francisco. How then will the Frazer River people be able to deal with England, send their letters thither, receive their information thence? Through an American channel, we of course reply. And if they deal with American merchants exclusively, receive English news through American papers, in short, form all their connections with the States, how long will it be before Frazer River will be symbolized by another star on the striped hunting? Or again, suppose Chicago, St. Louis, or Cincinnati, the nearest entrepôts for Asiatic produce, New York a greater commercial city than London or Liverpool, and New Birmingham and Manchester arisen near the line of the grandest trunk line of railway in the universe, all the loyalty in the world could not save Canada from following Frazer River.

We take it, our Pacific road ought to be commenced pretty soon. For if the Americans build one, it will be difficult indeed to construct a second, and, if they choose their most northerly route, all but impossible. As matters stand now we have the advantage of our neighbors, so far as opportunities go. In a few years the position of things may be reversed.

To shield ourselves from the charge of writing at random, let us look at the length and nature of the proposed route from Britain to Asia, to see if a Pacific Railway would be a paying speculation—since on this its practicability must depend, as matters are managed in England, although "they do these things better in France." We will compare it with the Panama route, as that is the quickest and shortest in actual use. We will, to

spare intricacy, suppose the whole journey to be done at the rate of Atlantic Steamship travel, viz., 280 miles per day, although this plan tells rather unfavorably for us; calculate ocean distances by middle latitude sailing, and take, as the distance from Thunder Bay, Lake Superior, to Victoria, V. I., the length of the route of the North-west Transportation Company—circuitous though it be. And we mention Galway as the European terminus of our line, because of the probability that the Galway steamers will eventually become as much, if not more Canadian, than American.

Table of Distances from Galway to Various Points on the Pacific Ocean.

From	To	Route.	Distance.	In favor of B. N. America.	Days.	In favor of North America.
Galway.	Canton.	Panama.	16,571	5,082	59	21.04
"	Shanghai.	B. N. America.	10,859	3,694	38 20	14.13
"	"	B. N. America.	13,631	880	49 00	3.3
"	Sydney.	Panama.	9,957	2,464	35 11	8.22
"	"	B. N. America.	12,667	295	46 5	1.2
"	Singapore.	Panama.	11,787	1,869	42 2	6.18
"	"	B. N. America.	15,211		54 8	
"	Bay of Islands.	Panama.	12,757		45 10	
"	"	B. N. America.	11 551		32 2	
"	Owhyhee.	Panama.	10,916		31 21	
"	"	B. N. America.	8,974		25 3	
"	"	B. N. America.	7,045			

We shall not take the trouble to compare either of the above routes with the far longer ones round Cape Horn or the Cape of Good Hope, further than to say that the average time of passage, either way, from Canton to Liverpool, is 110 days. These are the routes of past centuries and past methods of traveling. Ere long they will fall into disuse, and "Great Easterns," built to re-open them, will subside into their natural line of business, viz., ferrying across either ocean. The Pacific Ocean, as yet hardly ploughed by steamships, will prove their home. Over its smooth waters steamers will be driven at a speed with which Atlantic steamers can not compete, for there nature intercedes in their behalf, spreading a calm over its placid surface which is as unpropitious to sailing vessels as it is favorable to the paddle or screw. And North America, with its limitless plateaus, is "the field of all others for the locomotive. Thus the great route of the world's steam commerce may be at once seen to be marked out in unmistakable characters.

Half the cost to England of the Crimean war would finish the railway from Halifax to Vancouver, for one-third of the line is, in rea-

lity, already built. Will not merchant princes and gigantesque contractors—and there are such—take hold of so great, so beneficial, so remunerative an enterprise?—*Hamilton Spectator*.

AID TO RAILROADS—MISSOURI.

MR. EDITOR:—We are told, daily and almost hourly, of the vastly increased population; of the vastly increased amount of production of the State of Missouri; of the vastly increased wealth of the inhabitants; of the vastly increased size of the city of St. Louis—of its vastly increased business—of its vastly increased manufactories, and of an incalculable amount of material interests generally, all to result from the building of railroads. All of this I do not intend to affirm or deny, but the conclusions arrived at from these premises, admitting them to be correct, I do not object to. That conclusion is, that hence it is within the proper scope of the powers and duties of the government, as such, to embark all people in this business, whether they will or not. If to accomplish these things by the direct action of the governments is any part of the object for which they were formed, our ancestors engaged in as foolish business in forming them, as the same number of persons ever did before on the face of the earth. Instead of laying the foundation of civil liberty, they now merely engaged in this western hemisphere in an effort to perpetuate all the tyranny and despotism that prevails anywhere. But in fact they were engaged in no such business. They laid the foundation as they supposed, deep and strong, to prevent governments from interfering with individual interests. Knowing that this was the true cause of all governmental tyranny that has ever existed. Their object was to secure to every man the right unmolested to pursue such a course as he might choose to advance his own material interests, having due regard for the rights of others. If it is within the limit of the power of the government, and its duties, to promote by its direct action the material interest of the citizen, why go in this roundabout way to do it? Why not give him the money at once? Why borrow on his credit and for his benefit, as it is said, thirty millions to be expended, a part of it in building railroads, and about an equal part in enriching those who do not need the bounty of government? No doubt it will be answered for at least one reason, that it will do more good by and through the railroad plan. This is a dangerous answer to make, as I will soon show. But will it do more good in this way—that is the railroad way? I think not. And, besides, I know the benefits and burdens would be much more equally distributed by dividing out the money. Amongst those who favor this scheme, there are those who say it is good to a certain extent, and thus say it is good to any extent. The great controversy now seems to be as to what the extent is. So far as my observation of this matter has gone, I am satisfied the extent to which the government shall go in creating debt for building railroads, depends entirely upon whether the individual has succeeded in a speculation he expected to make out of it. Whether it has exhausted its influence to build up a town, or to cause some wild lands to increase in value, or because, as a contractor, he has "made his pack." The number of those who are not yet satisfied in this particular, ought surely to be conclusive that the thing has not yet been carried far enough. For instance, the Iron Mountain extension would like

to have at least two millions more. The North Missouri, north of the junction, would not refuse a million more. The Chariton, and Brunswick could, perhaps, get along with half a million. The Missouri River Valley, would be most grievously slighted with less than two millions. The Parkville and Grand River surely must not be neglected; pitch that at least at half a million, if only for the fairness of the thing. The Pacific ought, by all means, to have a couple of millions more, and the Southwest Branch, it is said, must have as much, or else nobody else shall have any. And then there is the Osage Valley—it will be satisfied with a million. And then, dear, sweet, beautiful old Lafayette is falling behind, and her people are close on the confines of destitution. She must have half a million for her switch. Every dime of this is needed, and common justice and fairness require they should have it. Have they not all burdened themselves to enrich others, and should not others do the same for them? And, besides, would not population, &c., &c., &c., &c., &c., &c., &c., &c., all, everything, and everybody, and all the rest of mankind be augmented, increased, built up and made happy generally and particularly? And then, when all this is done, the proper field for such a Pactus-like thing as railroads is yet scarcely touched. "Dog on it," better stop the whole thing, and, Midas-like, have everything we touch turn to gold right off, and no more fuss about it. Now, is it not ridiculous to suppose that such things as this is what our governments were made for? If this was the object, they were not well made. It is not half so efficient in matters of this kind, as the government of Louis Napoleon. He has larger cities, and more of them. He manufactures powerfully—his population is very much augmented. His resources are so well developed, that there is scarcely enough left to feed the people. In fact he has to make a war occasionally in order to thin out. So in England they have developed resources until they have developed everything in the hands of about one-thousandth part of the population, and the rest toil, and starve, and die. I say this thing is all outside of the duties and powers of our government. No man labors here for royalty or for nobles; he has the inestimable privilege of laboring for himself, and what he makes is his, and not to be taken from him to build a railroad; not to be taken from him to induce people to come to the State; not to be taken from him to build a city; not to be taken from him to promote manufactories. Not to be taken from him to pamper luxury. Not to be taken from him in short for anything, save to maintain and sustain the government. Nor is it necessary that it should be thus taken. All the means in the country belong to the people, and they have a perfect right, under equal and wise laws to do all these things, and the means to do them with—the government has no means, nor the right to any, but to carry on the government, and in the more economical way the better. We find great fault because some persons who do not own slaves will not rest satisfied because some others do. These persons say it damages your material welfare to have negroes about you, and they intend to do all they can to dispossess you, and they say I want to have a railroad, and I am willing to contribute of my means to build it; and he won't rest quiet until he appropriates a like amount of my property for the same purpose whether I am willing or not. He excuses himself by saying it is for my benefit; and so, exactly, says the anti-negroite. One takes my negro from me for my benefit, and the other takes his value from me for the same purpose.—*St. Louis Bulletin.*

ALL RAIL BETWEEN THE GULF OF ST. LAWRENCE AND THE GULF OF MEXICO.

The Jesuit Missionaries, who first penetrated the central portions of the American Continent, were possessed with indomitable energy and magnificent conceptions. Deriving their ideas from the grandeur of the lakes and the rivers, and the prairies which they were the first to explore, they established a cordon of military posts between Quebec and New Orleans, and for years cherished the sublime scheme of grasping the entire continent. The commencement of the year 1860 will witness Quebec and New Orleans connected by bands more powerful and enduring than were ever dreamed of by those old exploring heroes. In the comparison, military posts are but as cobwebs, and for all time to come commerce will bind, as by hooks of steel, Quebec and New Orleans to Chicago, the great central city of the continent. The magnificent conception of the old Jesuits will soon be more than realized.

From Chicago as the stand-point let us look eastward at the

GRAND TRUNK RAILWAY.

A few weeks since it was expected that this road would have been completed on Monday, Nov. 7th. It is completed to Sarnia, but as the Victoria Bridge, at Montreal, could not be finished till early in December, it was thought best to ballast the road between Detroit and Sarnia, and the opening of the entire line is now set down for the 20th of the present month. No man would dare to estimate the advantages which the opening of this road will confer upon the West. The first thing to be noticed is the establishment of a Weekly Mail between Chicago, Liverpool and London. A contract with our Government has already been obtained, and the first mail between Chicago and London is to be made up on Wednesday evening, Nov. 23d, and will leave this city on Thursday morning, Nov. 24th, at 8 o'clock, connecting with the Royal Mail Steamer, which is to leave Portland on Saturday morning the 26th. The European mail will leave this city thereafter every Thursday morning, connecting with Saturday morning's steamer from Portland. Passengers leaving with the mail on Thursday morning will be sure of the connection at Portland, as the steamer will be delayed till the mail train arrives. There will be but one change of cars, after the Victoria Bridge is finished, between this city and Portland.

In the above paragraph we have spoken only of Portland. In the summer cars will run to Quebec, and the ocean steamers will sail from that city. The distance from Chicago to Portland is 1129 miles; time only 38 hours.

The Grand Trunk Railway will not be completed as a freight line till its cars run direct to this city. This can be accomplished much easier, and with less expense, than might at first be expected. Let the Grand Trunk guarantee a reasonable interest on the stock of the Michigan Central, or upon the north line of the Michigan Southern, sell the rolling stock and relay one rail so as to make the gauge five feet and a half, and the thing is done. Then we should have no change of cars between Chicago and the Atlantic. Grain could be shipped in bulk all winter, and unloaded into vessels at Portland for Liverpool. As it is, we shall have but one transfer, and for this reason we predict a vast change in the business of the city within the next three years. Chicago importers can buy their goods direct from Liverpool, and it will only require from 12 to 15 days to place them here upon their own counters.

The arrangement made by the managers of

this road to induce and to accommodate a large emigration to this country, are of the most complete and comprehensive character. Passengers can obtain their tickets in all the principal cities of Europe direct to this city. About every hundred and fifty miles, comfortable eating houses will be established, where emigrants will be furnished with meals for twenty-five cents, or with coffee and a lunch, without meats, for twelve or fifteen cents. What is a very important matter with emigrants, they can deposit their money with the Company, and take a draft on the Company's office here, thus avoiding all danger of loss.

That the completion of the Grand Trunk Railway will make Chicago the distributing point for the foreign travel and commerce of the Mississippi Valley, there cannot be a doubt. That it will greatly promote the prosperity of the city and enlarge its business, is in our judgment equally plain.

Turn we now to the South, to contemplate the line between

CHICAGO AND NEW ORLEANS.

For the present the entire line will be broken by a ferry of only twenty-five miles between Cairo and Columbus, the nearest point at which the Southern roads can approach the terminus of the Illinois Central. Only twenty-four miles between Grenada and Shangola on the Mississippi Central Road, remains to be finished to complete the line. This is to be done before the first of January, when we shall have virtually all rail via Chicago between New Orleans and Quebec, and Portland. The locomotive will run from the mouth of the St. Lawrence to the mouth of the Mississippi, and the distance which it took the old Jesuits in their bark canoes weary months to accomplish, will be made in less than four days. Who can doubt that the opening of this great line from Gulf to Gulf, will work a vast change in the business affairs of the continent? Who can doubt that Chicago, situated at the head of our magnificent inland seas, on the dividing ridge between the valleys of the Mississippi and the St. Lawrence, and near the center of this great thoroughfare, will reap immense advantages from its completion?

It will be interesting to put the distance and the time between Portland and New Orleans in tabular form:—

	Miles.	Hours.
Portland to Chicago.....	1820	48
Chicago to Cairo.....	365	18
Cairo to Columbus.....	25	1½
Columbus to New Orleans.....	325	26

It will be seen that the time between New Orleans and Chicago will be less than two days; between New Orleans and Portland, about four; and fourteen days will suffice for the passenger to pass from New Orleans through the heart of the American Continent, and across the Atlantic to the capital of the British Empire. Was ever Arabian tale more truly strong and astounding?—*Chicago Press and Tribune.*

STOCK OPERATIONS.

It is well known that the English law has for more than half a century made time contracts in stocks illegal, and that a similar one operated in New York ever since the existing of a Stock Exchange until last year. The object of the law was "to check stock gambling," to restrain the moral evils that grow out of the desperate speculations that there develop themselves. As usual, however, with all such attempts at Legislative wisdom, whether exercised in respect of drinking or gambling, importing, inspecting or selling goods, sabbath breaking or street walking, or any other of

the pursuits or habits of the people at large, the effect of law was exactly opposite to its declared intention. It operated in fact as a protection to and premium on stock gambling, which went on to assume magnificent proportions until the bubble burst, spreading in a broadcast. Last year, a streak of wisdom gleamed through the quickly closing clouds that befog the law makers, and they repealed the old law, making all stock contracts legal; that is to say, they ceased to protect the gambler from the consequences of his own acts, and made his property liable for his operations. The result has been almost to extinguish stock gambling—the market has never been so dull since 1842 as in this year, and for the first time the brokers who operated boldly for a raise this Fall were disappointed in a response on the part of the public. Among the various evidences of the operation of the law is the case of E. Barlett, of South Street, which now attracts such attention in the stock and commercial circles.

The old law was based on the idea that it was the brokers who made the speculation, and it sought to punish them by depriving them of the aid of the law in collecting the debts due them as the results of such operations. The fact was, however, that the brokers however active they might be in getting up "corners," were only the agents for the public, mostly merchants engaged in other business. Thus, a merchant in good business and of large means might give an order—say for 100 shares of New York Central, buyer 60, say at 80; the broker would require a deposit of \$500, or 5 per cent. If the stock fell to 70, there would be a loss of \$1,000, which the merchant could not only refuse to pay, but turn round and, suing the broker, recover back his \$500, and repeat the operation with other brokers, pocketing profits and repudiating losses. While this swindling was legal, vast numbers of persons engaged in stock gambling, and the law courts were filled with cases. When the law threw its shield around the gambler, combinations were formed to run up and corner or depress stocks and destroy values by spreading alarm and frightening holders into selling their stocks. Frequently these combinations embraced the officers of companies, treasurers and others—persons who sometimes thrust themselves into the management of companies in credit, for the express purpose of forming a "bear party," and when heavily short of the stock to destroy the concern they pretend to manage, in order to benefit by the fall they had created, and there have been cases where, after reaping large profits by such transactions, the officer turned round and sued the company he had skinned for large amounts for "extra services." In these transactions the law protected all these persons from any loss, beyond the current commissions and expenses. If the profits ran from one thousand to several hundred thousands in their favor, they put it in their pockets. If the operation went against them the law said they need not pay, because such transactions are immoral. They stuck their tongue in their cheek and repeated "yes, immoral!" These were the source of the wild speculations that at times have overtaken the stock market. The Legislature last year changed all that. The law now holds every stock gambler responsible in all his means for his stock, as in all other transactions. The consequence is what we have seen in the past year—that the market has been confined to the brokers, who do not yet realize the changed position in which they stand to the public. During the last three months they formed a strong combination for the rise

in several Western stocks. Money was abundant, and the rise was rapid. According to all former experience "the public" should have "come in," and great inflation have resulted. The result was the reverse, however, and the market drags, with a heavy load upon "the street."—*Economist*.

THE RIGHTS OF STREET RAILROADS.

Street railroads having become quite a popular institution in most of our large cities, but like all great improvements, compelled to meet with occasional opposition, we have thought it might be appropriate to quote an article from the *American Railway Times* of a late date, upon the subject. This paper is published at Boston, and thus presents its views upon this exciting subject.

"In the Supreme Court, at this city, on Friday, October 28, a case relative to the right of horse railroad companies to the use of special speeds upon their tracks, was argued before the full bench.

On the 16th of November last, Mr. Ira Temple was driving a wagon at an ordinary rate of speed into Boston, over the line of the Middlesex horse railroad, and of the wheels of his vehicle was running in the outer rail of the track.

A car came up behind him, and the conductor requested him to turn out, which he refused to do. For this obstruction he was sued and fined. To the ruling of the Court (Judge Bishop) in this case the defendant excepted on the following grounds: That there was nothing in the evidence to show that the obstruction was malicious; that he was using his right in the highway in ordinary manner; that the corporation has no right to assume that any particular rate of speed is necessary on its track; and that instead of having a prior right to any portion of the public highway, their right is subject to the general right which is, and always has been, enjoyed by the public.

To the exception "that the corporation has no right to assume any particular rate of speed is necessary on its track," we object, as such special speed is provided for by the very conditions of the existences of the railroad. If we mistake not, the city itself fixed the speed, both at corners of streets, at crossings, and on others parts of the lines. Indeed, unless the corporation both have and exercise such right, they may as well take up their rails and at once; as to reduce the speed of the horse cars to that of teams hauling freight, would reduce the capacity of the railroad from 50 to 100 per cent. If every person who chooses to run his wagon with one wheel on the rail, is to be allowed to make his speed the limit for all the cars behind him, there is an end of metropolitan railroads. The city railroad cars are large and confined to the track, and have not the power of accommodating themselves to the carriage traffic. It has always appeared to us, that the very maximum of skill, care, and good manners, is observed by the horse cars. It is very seldom, almost never, that they injure or incommode the ordinary travel. We believe that the horse railroads are the indirect cause (by decreasing very much the number of vehicles needed to work the traffic), of allowing the wagons and carriages to use a much higher speed than could be had without them. Many a time have we ridden in a horse car for a quarter of a mile, behind some heavily loaded team, which was not even signaled to turn out of the track; but as many times have we seen light wagons remain on the rails knowing all the while that the car wished to pass. We think that a very little accommodation on both

sides would prevent any difficulty whatever; we see no lack of accommodation on the part of the cars, and we protest against tying the railroad speed down to that of any and every lumbering team that may like to run one of its wheels in the metropolitan or other tracks. Confine a car behind a wagon running at 2½ or 3 miles per hour, for fifteen minutes, and see what an accumulation of cars would take place. By so doing, we think one would have very little trouble in judging whether the railroad company should or should not be allowed to use a particular rate of speed upon its tracks.

—*Artizan*.

A NEW POWER.—A letter from Paris says that a new motive power has been discovered, which, upon experiment, has been found to be entirely successful, and has created a great sensation. The discovery has been made by a young workman named Jacob, a turner in copper, and was the result of an accident. While seeking to increase the power of his turning lathe, a new means of power was suddenly revealed to him, whereby he has been able alone, without assistance, to construct a machine which increases two hundred fold the labor of one man, and may be increased to an unlimited extent. The inventor, who has hitherto worked at Escarbotta, has been, of course, sent for to Paris, and he has already nearly completed a machine applicable to nearly every species of industry. If success should attend the experiment—for which, it is understood, one of the great industrial capitalists furnishes the money—the discovery will put an end to all steam power and every other expensive action, and the result is waited for with the greatest anxiety in the manufacturing world. Already have the proprietors of the spinning works at Schaffhausen been induced to go to Paris, in order to hear the first news of the success or failure of the trial.—*Economist*.

IMPORTANT SUGGESTIONS

An American engineer, now a resident in England, in a letter to the *New York Times* details the railway comforts to be enjoyed by the traveler abroad, with hints at improvements which would prove profitable to railroad managers and satisfactory to the public at home. He thinks:

"First—That a far higher standard of passenger comfort may be obtained in both countries, with a positive decrease of ultimate cost to railway companies by copying special features in one another's systems.

Second—That luxurious carriages and fast trains, somewhat on the European plan, might be at once attached to American lines for invalids, parties, and the many people who, from necessity or choice, would gladly pay for riding in them, to the immediate pecuniary advantage of the companies themselves.

Third—That various entirely new conveniences might be added to all sorts of carriages, without much cost, and greatly to the amelioration of railway travel."

Special comforts, at an extra charge per mile, can be always obtained on English roads, while in this country, to the same extent, they cannot be had for love or money. To the objection that at our low rates of fare, our railroad managers can not afford them, he replies that "a railroad company is no more bound to provide artificially cooled air and soporific cushions for the mere cost of locomotion, than is an opera manager to furnish orchestra seats for the price of standing room, or a captain to

provide bridal state-rooms to the holders of steerage tickets."

The practical plan he proposes is, to graduate the scale of prices to the quality of the accommodations afforded. In England a given size of car carries an average of 21 first-class passengers, at 4-14 cents a mile, or 32 second-class, at 2-88 cents, or 32 (or more if occasion requires) third-class, at 1-66 cents per mile. The first-class accommodations are splendid upholstery, good ventilation, plenty of room, and in many cases a higher speed than that of second class cars. The second-class accommodations are slightly less room than is afforded in ordinary American cars, good ventilation and rather limited upholstery. For short distances they are sufficiently comfortable for gentlemen in good health, and are largely patronized by first-class people. Third-class fare buys merely decent transportation. If there is a crowd, passengers must sit uncomfortably close. There is no upholstery, but the ventilation is generally uninterrupted, since many third class cars are merely a box, with a cover supported on small posts. Third-class passengers are never sent by express trains. Thus the comfort and speed of transportation is in proportion, not to any fictitious standard of equality, but to the only known standard in other commercial matters—what a man can afford.

A very great improvement in this direction would be a large variation of fare with reference to speed. With Americans, time saved is of greater commercial importance than sleep and comfort. The especial value of the system to railway owners would be that they could then more nearly approximate the charge for transportation to its actual cost, for speed is the chief modifier of railway expenses. If an average speed of thirty miles an hour is maintained by all passenger trains, and the remunerative fare is three cents per mile, it is likely that half the passengers would be content to go at eighteen miles and pay two cents, which would increase the company's revenue, for if the fare is low the company can take its own time. On the contrary, a portion would be only too glad to pay five cents for a speed of forty miles, which would also increase the company's profits, for if the speed is satisfactory, the company can charge its own price, and for the few fast passengers it can employ light locomotives, which make even high velocities as cheap as common American speed with our ordinary rail-smashing engines.—*Western Railroad Gazette.*

A WONDERFUL LIGHT.—The Rochester (N. Y.) *Democrat* says that Dr. Geo. W. Smith, of that city, has invented a light much more powerful than the Drummond light. This light was attached to a locomotive on the Central Road, and it threw such a light that the least obstruction could be discerned at a distance of twelve to fifteen hundred feet. On a long stretch of straight road, the locomotive was brought to a stop, and the party alighted to go ahead in order to ascertain the effect upon an observer. Looking at the light from a distance of fifteen hundred feet, the eye is unable to endure its brilliancy more than an instant, and from a distance of one thousand feet it cannot be steadily observed at all. It was found that a man with optics of ordinary power could, solely by the light reflected by the lamp, readily read a newspaper printed in type like that with which this article is set, *a full quarter mile from the locomotive!* This seems incredible, but it is literally true. The distance was carefully measured off by a professional engineer who was of the party.

WESTERN AND ATLANTIC R. R.

The gross earnings of this road for the fiscal year ending September 30, 1859, were—

From passengers.....	\$988,713 38
" freight.....	489,691 48
" mails.....	22,750 00
" miscellaneous.....	21,195 17
	\$632,343 03

And the expenses were—

Conducting transportation.....	\$ 86,631 58
Maintenance of way.....	145,559 18
Maintenance of cars.....	33,309 88
Motive power.....	101,302 27
General Expenses.....	10,938 59
	379,801 50

Net profits.....\$454,541 53

The amount received for the carriage of passengers, freight, mails, etc., during the year—

Was.....	\$1,001,563 19
Balance from previous year.....	59,820 34

Total receipts from all sources.....\$1,061,443 93

Disbursed as follows:

Working expenses.....	\$377,780 50
do. prior account.....	6,354 40
Equipment and passenger depot.....	27,325 40
Bonds and coupons.....	24,665 00
Paid other roads.....	144,078 12
Paid State Treasurer.....	402,000 00
	982,429 42

Leaving a balance of.....\$75,054 51

Since January 1, 1858, there have been purchased and laid down 2,040 tons of heavy T rail, which, with new rails taken from sidings, covers about 27½ miles of road. This new iron, together with other permanent improvements, such as ballasting, new bridges, bridge repairs, deep ditches, new timbers in road bed, and the improved condition of the machinery, rolling stock, etc., make the road, in the opinion of the Superintendent, worth at least \$200,000 more than it was two years ago.

In addition to the \$402,000 paid into the State treasury the past year, there were also paid \$20,900 of bonded debt which became due in January last, together with the coupons upon the remaining outstanding bonds, and certain unadjusted claims, amounting in the aggregate to \$28,243 53. But for this, and the purchase of so large an amount of iron, the road would have paid into the treasury very easily \$450,000, and left on hand an excess sufficiently large to meet any probable contingency; and but for the heavy additional expense for bridging, this sum would have been still further increased.

The road bed, and all the superstructure and machinery are kept in good repair. No new debts are contracted which are not promptly paid monthly, and no agent has been appointed or retained in office known to be a defaulter to the amount of a single dollar.

No statement is given of the cost of the road; for this we are obliged to refer to the message of the Governor. He says:

Regarding it as a matter of interest, I have endeavored, at the expense of considerable labor, to ascertain the original cost of the State road; but I find it impossible to arrive at a conclusion with entire accuracy. It is believed that the report of Col. C. F. M. Garnett, then Chief Engineer, made in 1847, of the amount expended to that time is about correct. He estimates the whole cost to the date of his report, at \$3,305,165 88. Since that time there has been appropriated to the construction of the road, its equipment, &c., in cash, and in the bonds of the State, to the sum of \$1,136,366 27. Add these sums together, and we have \$4,441,532 15, as the total amount appropriated by the Legislature, and paid out of the State Treasury for the construction and equipment of the road. This, in my opinion, is a very near approximation to correctness.

Estimating the original cost, therefore, at \$4,441,532 15, the road during the past fiscal year (ending 20th October last) has paid into the treasury of the State nearly nine and a half per cent. upon the original investment. And it should not be forgotten in this connection that it was built at a time when railroad-ing was not well understood, and that it was built as a public work, at a cost greatly more than would have been expended in its construction, even at that time, by a private company.

Had the same economy been used which is usually practised by private companies, the whole cost of the road would not probably have exceeded, if it even had amounted to \$3,000,000.

The sum paid into the treasury during the past year is fourteen per cent. upon that sum. In comparing the present management of the road with company management, it is certainly just to the present officers, who did not build it, to count the per cent. upon such sum only as the road should reasonably have cost had it been built by a company, and not upon such sum as it may have cost under the extravagant system which is sometimes practised in the original construction of public works.

The officers of the road are—

John W. Lewis, Superintendent.

B. May, Treasurer.

Eugene LeHardy, Chief Engineer.

THE BEGINNING OF THE END.

The absolute necessity of reducing the capital cost of many of our weak railroads, is beginning to be felt and duly acted upon. It is a great deal better for all parties that some amicable arrangement be made at once, even if all parties are required to sacrifice something in order to gain a certain specified and decided good. According to the *Tribune*, at a meeting of the Terre Haute and Alton, Belleville and Illinoistown, and Terre Haute, Alton and St. Louis Railroad creditors, held in New York last week, the following general plan was proposed: 1st. The immediate surrender of the road to the trustees under the second mortgage, the property to be sold, and the company reorganized upon the following basis:

1. The first Mortgage upon the Terre Haute and Alton, and Belleville and Illinoistown, to remain intact, but one year's interest beyond the now current coupons, to be deferred until 1861 and 1862.

2 The Second Mortgage bonds to be exchanged for new bonds maturing in 1892, and the new bonds to be given for the coupons on the seconds up to March, 1862. The present second mortgage bondholders are also to pay ten per cent. in cash, receiving new bonds in exchange, as above, for principal and interest to 1862.

3. The Third Mortgage and Fourth Mortgage bondholders to be made Preferred Stockholders at par, upon condition of advancing ten per cent. in cash (for which they get Second Mortgages.) Failing to do this, they are to have but 30 per cent. of Preferred Stock.

4. The General Creditors to be made preferred Stockholders by paying 10 per cent. to the Second Mortgage Trustees, as above, and failing to make a cash advance, to get 30 per cent. in stock. Stockholders to be new stockholders at the rate of 40 per cent. now for each 100 of old, provided they are not debtors to the company. No dividend of over 7 per cent. be made upon common stock until all the floating debt of the proposed new company is paid; and all

over 7 per cent shall form a Sinking Fund to pay the first mortgage. Upon this reorganization, the Committee think the new company could pay a dividend on all its stock and bonds.

So far as the plan refers to the adjustment of the first and second mortgage claims, the report was adopted by the meeting; but objections were urged by several parties to the details of the report, and its provisions so far as they relate to the third and fourth mortgage bonds and foresecured debt, it being claimed that the proposed assessment should be omitted, or modified in respect to all securities and interests junior to the second mortgage. It was also insisted that the deeds upon which any of the present or former directors were liable should have more ample protection than was provided in the committee's plan. Objections were made that a debt of about \$4,000 to the Terre Haute and Richmond Road was proposed to be paid in full in second mortgage bonds; while a debt of about \$100,000 to the Michigan Southern and Northern Indiana Road was proposed to be settled at 40 per cent., and paid in common stock. After full discussion, it was unanimously voted that the committee be authorized to modify the programme reported by them, so far as it related to debts or claims later than the second mortgage, retaining, however, the principal of some assessment to be levied upon them, leaving the amount thereof and all details in the discretion of the committee; and the committee were requested to proceed with all possible dispatch to carry into effect the plan as it should be thus modified and finally agreed upon.

RAILROAD COMMUNICATION BETWEEN BALTIMORE AND NASHVILLE.—On the 1st instant the Louisville and Nashville Railroad was opened for travel and freight between those two cities. This is an important road to the trade of our city, as it gives direct railroad communication between Baltimore and the capital of Tennessee, and affords easy access to an extensive and wealthy section of the country. Heretofore goods shipped from Baltimore to Nashville, had generally to be sent by a circuitous route via Charleston or Savannah, and occasionally, during a high state of water, by way of the Cumberland river. We understand that during the last few days the shipments from this city for Tennessee over the Baltimore and Ohio railroad, and thence to Louisville, to be sent over the new railroad route to Nashville, have been quite heavy.—*Baltimore Sun.*

GEORGIA RAILROADS.—Governor Brown, of Georgia, says in his late message to the Legislature that the State has derived the past year \$420,000 net profits from the Western and Atlantic Railroad, notwithstanding expensive repairs made upon it. He estimates the road to have cost the State \$4,441,000. To the Atlantic and Gulf road, \$250,000 in State bonds have been issued, and \$50,000 more shortly will be. The State issues \$50,000 in bonds for every \$60,000 paid in by the stockholders. He thinks well of the road, and still adheres to the opinion that State aid, in the way of endorsement and guarantee, might be judiciously extended to other roads, but only under conditions sufficient to insure the State against losses. He proposes to hold the stockholders liable to the State for every deficiency to pay interest or principal not met by the sale of the road.

THE RAILROAD RECORD.—This valuable journal, published at Cincinnati by Wrightson & Co., at \$3 per annum, contains all information of importance connected with railways throughout the Union. It should be patronized.—*Pensacola Observer.*

THIRTY-THIRD ANNUAL REPORT OF THE BALTIMORE AND OHIO RAILROAD.

We are indebted to an officer of the Baltimore and Ohio Railroad for an advance copy of the thirty-third annual report of the President and Directors to the Stockholders. We have only space and time, since its receipt last night, for a general summary of the operations of the road for the year. We, therefore, compile the following statement of the aggregate revenues, working expenses and net results of the Main Stem, Washington Branch, and Northwestern Virginia Railroad, for the fiscal year terminating, respectively, Sept. 30, 1858 and 1859.

Revenue.	1858.	1859.	Decrease.
Main Stem.....	\$3,856,485 79	\$3,618,618 45	\$237,867 39
Wash'ton Branch.....	469,422 92	442,219 53	27,203 39
N. West'n Va. R.R.....	248,004 06	240,171 29	7,832 77
	\$4,573,912 77	\$4,301,009 27	\$272,903 50
Expenses.			
Main Stem.....	\$2,531,199 19	\$1,684,997 84	\$846,201 45
Wash'ton Branch.....	205,432 64	173 6 25	28,774 39
N. West'n Va. R.R.....	233,252 79	198,210 58	54,982 21
	\$2,969,905 72	\$2,056,947 67	\$929,958 05
Total decrease of Working Expenses.....			\$929,958 05
" " Gross Revenue.....			272,903 50
Total increase of Net Earnings.....			\$657,054 55

This statement shows an aggregate reduction of \$929,958 05 in the working expenses, compared with the preceding year; thus, notwithstanding the decrease of \$272,903 50, of gross revenue, accomplishing an increased net gain of \$657,054 55. This result may be directly attributable to the policy and good management of John N. Garrett, the accomplished President of the road.

The way business of the year shows a gratifying increase, under the fostering care of the managers.

The revenue from coal for the year has been \$834,380, less by \$30,619 05 than the preceding year, which is explained by the reduction of fifty cents per ton.

The aggregate earnings of passenger trains amount to \$1,260,688 01, being 29.31 per cent. of the gross revenue.

The total decrease of the working expenses on the main stem and branches, with the reduction of interest, amounts, for the year, to \$992,595 37, a practical commentary upon the management of railroads that is worthy the attention of other roads.—*Cin. Eng.*

COLUMBIA AND READING RAILROAD.—We learn from the Reading *Democrat* that a meeting for the election of Directors of this contemplated road was held at Ephrata, a few days since, and the following gentlemen elected:

President—Joseph Koenigsmacher.

Directors—M. E. Lyons, Frederick Lauer, E. Billingsfield, Sebastian Miller, Adam Koenigsmacher, Nathan Worly, Joseph Hostetter, Samuel Shock, A. S. Green, C. S. Kaufmann, S. Lichtenthaler, Levi Hull.

TO UNION SPRINGS CERTAIN.—The trains of the Mobile and Girard Railroad are now running to our village, though not up to the depot. The hands are engaged in finishing up, and the depot houses are being erected with all the facility at the command of the contractors. We are glad in being able to herald this event, and we presume the road will be carried on into the "State of Pike," as soon as possible. Look out below, and get off the track when the whistle blows.—*Union Springs Gazette.*

MONETARY AND COMMERCIAL.

The offerings at the discount houses still continue large and beyond their ability to accept, although for the last day or two there has been a better supply of currency than for some time previous, producing a better feeling among money men. There is great care used in selecting the paper offered, and none but the very best is accepted. We quote rates as heretofore, viz., 10@12 to customers, outside rates from 15 to 18 per cent.

Eastern Exchange has given way under pressure and is now bought at $\frac{1}{2}$ prem., and selling at $\frac{1}{4}$ premium. We quote:

	BUYING.	SELLING.
New York Sight.....	$\frac{1}{2}$ @ $\frac{1}{2}$ prem.	$\frac{1}{2}$ @ $\frac{1}{2}$ prem.
Boston.....	par.	$\frac{1}{2}$ @ $\frac{1}{2}$ prem.
Philadelphia.....	$\frac{1}{2}$ @ $\frac{1}{2}$ prem.	$\frac{1}{2}$ @ $\frac{1}{2}$ prem.
Baltimore.....	par.	$\frac{1}{2}$ @ $\frac{1}{2}$ prem.
New Orleans.....	par.	$\frac{1}{2}$ @ $\frac{1}{2}$ prem.
American Gold.....	$\frac{1}{2}$ @ $\frac{1}{2}$ prem.	$\frac{1}{2}$ @ $\frac{1}{2}$ prem.

We annex a comparison of Market values of Railroad Shares, in New York, for the past four weeks:

	Oct. 28th.	Nov. 4.	11th.	20th
N. Y. Central Shares.....	80 $\frac{1}{2}$	81 $\frac{1}{2}$	80 $\frac{1}{2}$	80 $\frac{1}{2}$
N. Y. & Erie R. R. Shares.....	6 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$
Harlem R. R. shs.....	10	10 $\frac{1}{2}$	9 $\frac{1}{2}$	10
Reading R. R. shs.....	38	38 $\frac{1}{2}$	38 $\frac{1}{2}$	37 $\frac{1}{2}$
Hudson Riv. R. R. Shs.....	36	36 $\frac{1}{2}$	37 $\frac{1}{2}$	39 $\frac{1}{2}$
Michigan Cen. R. R. Shs.....	41	40 $\frac{1}{2}$	41 $\frac{1}{2}$	41
Do. Southern R. R. shs.....	4 $\frac{1}{2}$	6 $\frac{1}{2}$	6 $\frac{1}{2}$	6 $\frac{1}{2}$
Panama R. R. shs.....	124	122 $\frac{1}{2}$	123	131
Balt. & Ohio R. R. shs.....	57	—	57 $\frac{1}{2}$	60
Illinois Cen. R. R. shs.....	65 $\frac{1}{2}$	64 $\frac{1}{2}$	63 $\frac{1}{2}$	61
Clev. & Toledo R. R.....	10 $\frac{1}{2}$	21 $\frac{1}{2}$	20 $\frac{1}{2}$	20 $\frac{1}{2}$
Chicago & R. I.....	62 $\frac{1}{2}$	53 $\frac{1}{2}$	63 $\frac{1}{2}$	63
Galena & Chicago.....	72 $\frac{1}{2}$	73 $\frac{1}{2}$	72 $\frac{1}{2}$	72

City Railroad Shares are held at high rates, and in more active demand, viz:

Brooklyn City R. R. Co.....	116	118
Second Avenue R. R. Co.....	108	112
Third Avenue Railroad Co.....	150	150
Sixth Avenue Railroad Co.....	140	150

In Railroad Bonds we note sales to-day of Galena Second Mortgages at 89@89 $\frac{1}{2}$; Erie Fourth Mortgages, 47 $\frac{1}{2}$; Erie Bonds of 1871, 25; Harlem Second Mortgages, 91 $\frac{1}{2}$; New York Central Sixes, 91 $\frac{1}{2}$. The demand for first class Bonds is steady at quotations, but for others there are more sellers than buyers, and rates nominal.

We annex the closing prices of Miscellaneous Securities in the New York Market for the past four weeks:

	Oct. 30th.	Nov. 4.	11th.	20th
Erie Railroad 7's, 1859.....	74	75	74	75
Erie bonds 7's.....	24 $\frac{1}{2}$	24	24	25
Erie Convertibles 71.....	22 $\frac{1}{2}$	25	24	25
Hud. River R. R. 1st Mort.....	102 $\frac{1}{2}$	—	102 $\frac{1}{2}$	103
Panama Railroad bonds.....	—	—	100	100
Illinois Central 7's.....	85	84 $\frac{1}{2}$	85 $\frac{1}{2}$	85 $\frac{1}{2}$
N. Y. Central Sixes.....	93 $\frac{1}{2}$	*90 $\frac{1}{2}$	91	91 $\frac{1}{2}$
Canton Co. shs.....	18 $\frac{1}{2}$	18	17 $\frac{1}{2}$	17 $\frac{1}{2}$
Pennsylvania Coal Co.....	82 $\frac{1}{2}$	63	52 $\frac{1}{2}$	63
Cumberland Coal Co.....	14 $\frac{1}{2}$	13 $\frac{1}{2}$	13	13
Del. & Hud. Canal Co.....	96	97	96 $\frac{1}{2}$	98
La Crosse Land Grants.....	15	—	11	11
Pacific M. S. Co.....	71 $\frac{1}{2}$	70 $\frac{1}{2}$	73 $\frac{1}{2}$	73 $\frac{1}{2}$

*Ex. Interest.

State Loans are firmer than usual. The financial position of the States whose Bonds are freely offered in this market is such as to claim confidence on the part of capitalists. Minnesota Railroad Loan Bonds are offered at 95; their Coupon Bonds are held at 104; Maryland Sixes 112 and 103.

We continue our comparative quotations of State Loans in the New York market for four weeks:

	Oct. 28th.	Nov. 4.	11th.	20th.
U. S. 6 per cent. 1867-8.....	108 $\frac{1}{2}$	—	108	108 $\frac{1}{2}$
U. S. 5 per cent. 1873-4.....	103 $\frac{1}{2}$	103 $\frac{1}{2}$	102 $\frac{1}{2}$	103 $\frac{1}{2}$
Ohio Six per cents, '86.....	107	107	107 $\frac{1}{2}$	108
Kentucky Six per Cents.....	103 $\frac{1}{2}$	103 $\frac{1}{2}$	104	104
Indiana five per cents.....	85 $\frac{1}{2}$	85 $\frac{1}{2}$	85 $\frac{1}{2}$	86 $\frac{1}{2}$
Pennsylvania five do.....	93 $\frac{1}{2}$	94 $\frac{1}{2}$	93 $\frac{1}{2}$	92 $\frac{1}{2}$
Virginia six per cents.....	95	94 $\frac{1}{2}$	94 $\frac{1}{2}$	93 $\frac{1}{2}$
Georgia six per cents.....	101	99	102	110
California seven, '77.....	83 $\frac{1}{2}$	84 $\frac{1}{2}$	80 $\frac{1}{2}$	84 $\frac{1}{2}$
North Carolina sixes do.....	97 $\frac{1}{2}$	97	97	98
Missouri six per cents.....	85	85 $\frac{1}{2}$	84 $\frac{1}{2}$	81 $\frac{1}{2}$
Louisiana six per cents.....	92 $\frac{1}{2}$	93	93 $\frac{1}{2}$	94
Tennessee sixes, 1892.....	90	90 $\frac{1}{2}$	90 $\frac{1}{2}$	90 $\frac{1}{2}$

The Clinton *Herald* says that the grading of the branch road, which is to connect the Galena and Chicago Railroad with the Clinton Railroad Bridge, was begun this week—JOHN S. WOLFF, of Cedar Rapids has the contract. At present the connection will be made at or near the Fulton Engine House, but experience will undoubtedly demonstrate a necessity for a more economical arrangement than that.

GREAT SALE OF
RAILROAD LANDS.
40,000 ACRES
Of the Finest Arkansas Lands, at
PUBLIC SALE.

Pursuant to an order of the Board of Directors of the Little Rock and Fort Smith Branch of the Cairo and Fulton Railroad Company, made on the 8th day of June, 1859, 40,000 Acres of Land will be offered for sale at the Office of said Company, in the city of Van Buren, Crawford County, Arkansas, on

MONDAY, THE 14TH DAY OF NOV., 1859, and from day to day until sold, being about one half of the lands attached to the First Division of said Road. These lands are advantageously situated upon, and near the Line of the Little Rock and Fort Smith Branch Railroad, which is now being placed in course of construction. They comprise some of the most valuable bottom and uplands in Western Arkansas, and are situated in the Counties of Crawford, Sebastian, and Franklin, and are within twenty miles of the City of Van Buren, and within twenty-five miles of the City of Fort Smith. This Railroad traverses a part of the finest and richest portion of the State, and its completion within five years, will afford railway communication with every portion of the Union. Immigration to this State has been steadily increasing until the better part of the Government Lands are absorbed. The lands attached to this road were selected and confirmed years ago, and are now brought into market for the first time, and present inducements to planters and Farmers desiring to emigrate from the older States, and rare opportunities to Capitalists for safe and remunerative investments. The climate is unequalled by any portion of the Great West for salubrity and health; the soil is remarkably productive, and the country well watered and timbered. The Company are in condition to make good title to the lands now offered for sale.

TERMS—One third cash; one third in six months; and one third in twelve months; notes to bear interest from date, at the rate of ten per cent. per annum, until paid. Full lists of these lands, and all desirable information concerning them, will be furnished on application, personally, or by Mail, to J. B. OGDEN, Secretary, at the Company's Office, in Van Buren.

JESSE TURNER, President.

Office of L. R. & F. S. Branch of C. & F. R. R. Co.
VAN BUREN, ARK., August 31, 1859. Oct. 20.

WILLIAMS'
CINCINNATI DIRECTORY
1860.

OUR Canvassers are now engaged collecting information for the CINCINNATI DIRECTORY for 1860. (Tenth Annual Issue.) The Directory for 1860 will be greatly improved over any former issue. It will contain, in addition to Cincinnati, Directories of Covington and Newport, a complete list of Post Offices in the United States, and many other improvements. It will be issued on the 1st of January. Subscription Price will remain as heretofore, \$2.

C. S. WILLIAMS,
194 Walnut Street.

WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, STROBRIDGE & CO.,
Jan 8 1y 119 Walnut st., Odd Fellows' Building

Opening of the Eastern Route

VIA

"Delaware Cut Off."

SHORTEST LINE TO CLEVELAND.

ON MONDAY, the instant, the CINCINNATI, HAMILTON AND DAYTON in connection with the CLEVELAND, COLUMBUS AND CINCINNATI R. R. Co., opens its new passenger route to all Eastern points, via Cleveland and Pittsburgh. Trains will leave Cincinnati at 10 A. M., through to Cleveland without change of cars, and at 11-30 P. M., Pittsburgh Passenger—change cars at Crestline.

Passengers returning from the East make direct and close connections, both at Cleveland and Pittsburgh, by all trains.

The attention of shippers of Freight from the East is called to this line. LOWEST PRICES AND QUICKEST TIME GUARANTEED. Mark "Via Delaware Cut-off." D. McLAREN, Sup't.

NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith
Branch of the Cairo and Fulton Rail-
road Co., Van Buren, Ark., Sep. 10, '59.

SEALED PROPOSALS for the graduation of the First Division of twenty miles eastward from Van Buren, will be received at this office until **Thursday noon, December 1st, 1859.** The work is divided into twenty sections of about one mile each, and proposals for either a part, or the whole of this Division may be made; but no bids for less than one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise. Estimates of work done will be made on the first day of every alternate month, and payments made on the first day of the month following; and fifteen per cent. of all estimates will be retained until the completion of the contract. Contractors desiring other terms of payment may bid accordingly, as the above terms are not positively settled.

The Company having a large amount of the finest Lands in Western Arkansas, will give preference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications may be seen, and all desired information obtained, upon application at the Engineer's Office, in Van Buren.

JESSE TURNER, President.

NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith
Branch of the Cairo and Fulton R. R.
Co., Van Buren, Ark., Sep. 10, 1859.

SEALED PROPOSALS for the Masonry of the First Division of twenty miles eastward from Van Buren, will be received at this office until **Thursday noon, December 31st, 1859.** No bids for less than the amount of Masonry upon any one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise.

Contractors will state terms of payments, and proportions of money, stock and lands, and amount to be retained by the Company to secure the completion of the contract. The Company reserves the right to reject any and all bids at its option.

Plans and specifications may be seen, and all desired information obtained on application at the Engineer's Office, in Van Buren.

JESSE TURNER, President.

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANA OR SANDOVAL

FOR

Decatur, Springfield,
Bloomington, Peoria,
Burlington, Quincy,
La Salle, Rock Island,
Dixon, Galena,
Prairie du Chien, St. Paul, and
St. Anthony,
And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANA for all the above points. Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R., at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via

PANA OR SANDOVAL AND ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

THE Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,
Gen'l Southern Agent, Cincinnati.

W. P. JOHNSON,
Gen'l Passenger Agent, Chicago.

MOSELEY'S
WROUGHT IRON
ARCH BRIDGES
—AND—
Corrugated Iron Roofs
ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders a No. 66 West Third Street, Cincinnati, Ohio.

Spt. 2. MOSELEY & CO.

Winter Arrangement, 1859-'60.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the

West, South-West and North-West.

TWO TRAINS

Leave Wheeling daily at 12:35 P. M., and 10:10 P. M.

One Train leaves Parkersburg daily at 9:20 P. M.

Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.

Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2.

Time as quick and Fare as low as by any other ROUTE.

INQUIRE for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

E. F. FULLER,

General Western Agent.

L. M. COLE,

General Ticket Agent.

W. P. SMITH, Master Transportation.

To Contractors having Capital.

THE MARYLAND AND DELAWARE RAILROAD CO. will receive sealed proposals until the 1st of December for the work and materials of fifty-three miles of Road; extending from its junction with the Delaware Railroad, at Sangena, Delaware, to Oxford, Maryland; forming the shortest connection between Philadelphia and Chesapeake Bay, at a point always unobstructed by ice, near the mouth of Great Choptank River.

The resources of the Company (which is free of debt.) consist of individual stock, State appropriations, and work already done; but they propose to make payment for the work now offered, principally in First Mortgage Bonds; which they are prepared to show will be a safe, interest paying and profitable investment.

Twenty miles of the Railroad are already graded, the entire line located and secured, and the nature of the work very favorable for Contractors.

A circular containing a map and profiles, with descriptions of the character, position, and resources of the road, will be issued about the 25th inst., and sent by mail on application to I. C. W. Powell, Secretary Maryland and Delaware Railroad Co., Easton, Md.; to whom proposals will also be addressed.

Oct. 30.

TENCH TILZHMANN, President.

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circular which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the retrofit is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retrofits stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet,.....	\$300 00
do do do 350 " " " " " " " " " "	335 00
do do do 400 " " " " " " " " " "	375 00
do do do 500 " " " " " " " " " "	450 00
do do do 600 " " " " " " " " " "	525 00
do do do 700 " " " " " " " " " "	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 1000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, as now in operation in several States, apply to

R. T. COVERDALE,

167 Walnut Street, Cincinnati, Ohio,

who has the exclusive right to manufacture and sell in the State of Ohio.

Feb. 24th, 1859.

APPLEGATE & CO.,
Booksellers, Publishers, Stationers & Blank
Book Manufacturers,
43 Main St. Cincinnati, O.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Country merchants, and others to extensive stock of cal, Theological, dard, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangement with the leading publishers, the principal manufacturers of Paper and Stationery, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

BOOKSELLERS,

Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, Envelope, Manilla paper; Bonnet, Pins, Gold and steel Pens, Penholders, Copying Books, Ink and surs, Sealing Slates, Mucilage, Book rests, Bill Envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files; Date Calendars, together with all other articles used in the counting-house.

Stationers,

To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly paged, including all sizes, from the small memo- the large Super- rial Ledger, and variety of styles workmanship, order of any de- with or without ruling and warranted to in quality of pa- ruling and durability of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

BLANK BOOK MANUFACTURERS,

We are prepared to Print and Bind books tion and in any style sired, at rates as low quality of work cuted in this where. Our executing these the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Cards, Circulars, or tion of printing, will that we do such jobs despatch. Orders re-

Stereotype, of any descrip- that may be de- as the same can be exo- city or else- facilities for branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bill Heads, Dray receipts, any other descrip- please bear in mind with neatness and respectfully solicited.

Publishers,

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, Clark's Com- menta- ries, Dick's Works, Rol- lin's Ancient History, Pintarch's Lives, Josephus, Spectator, Chain of Sacred Wonders, Familiar Science, Webb's Monitor, Solen's German, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, of narrative and Books suited to every condition, and Books and Station- ery in endless variety, make our stock complete and can not fail to please. We in- vite all to give us a call.

43 MAIN STREET!

W. HARVEY'S SAFETY JOINT For Coupling the Ends of "T" Rail PATENTED, NOV. 2, 1858.

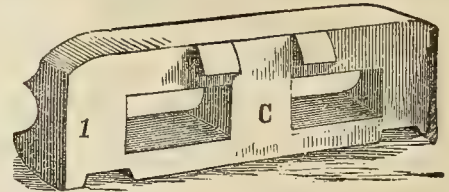


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

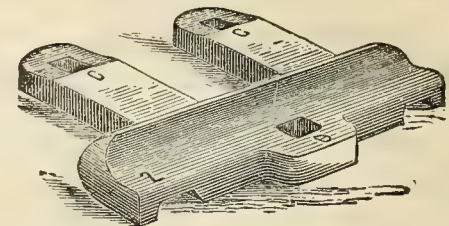
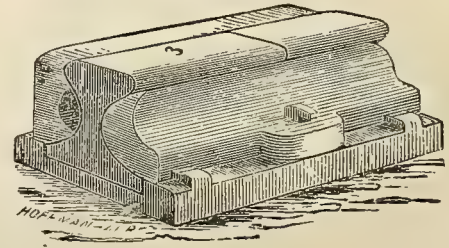


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that one part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly free road, thereby doing away with the breaking of rails, wheels, and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear of the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
41 Jefferson-street, Albany, N. Y.
ON AGENT, Cincinnati, O.

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

SOLE IMPORTERS
PROSSER'S PATENT SURFACE CON-
DENSERS for high pressure steam, with sea or
other bad boiler water, gauges, 3-cutter drills, counter-
sinks, tube end cutting bars, expanders, tube cutters,
steel wire and whalebone brushes, pall lever wrenches,
tubes—plain or enameled, screwed together for Artesian
Wells, HOLLOW SLABS for various purposes, Steel for
Boilers. THOS. PROSSER & SON,
97 Jan. 28 Platt Street, New York.

G. LOBDELL. H. S. M'COMBS. D. P. BUSH.

BUSH & LOBDELL,
Wilmington - - - - - Delaware
MANUFACTURERS OF

CHILLED WHEELS

AND
TIRES,
For R. R. Cars & Locomotive Engines,
ARE PREPARED TO

Execute Promptly Orders to any Extent
FOR THEIR
CELEBRATED WHEELS,
EITHER SINGLE OR DOUBLE PLATE,
WITH OR WITHOUT AXLES.

WHEELS FITTED
To Hammered or Rolled Axles.
In the best manner, at the shortest notice, and on the
Most Reasonable Terms.

ad2

A Book for Every Business Man!
JUST PUBLISHED

—THE—
POST-OFFICE GUIDE!
For Post-Masters and Business Men.

CONTAINING
A Complete List of Post-Offices in the United States
and Territories, arranged by States and Counties; A
Complete List of all Distributing Post-Offices; Rates of
Foreign and Domestic Letter Postage; Rates of
Printed Matter, Transient and Regular; Abstract
of the Laws and Regulations of the Post-Office De-
partment, &c., &c.

COMPILED BY E. PENROSE JONES,
Late Assistant Post-Master at Cincinnati.
Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.

U. S. BLANK AGENCY, CINCINNATI POST-OFFICE, }
January, 1859.
This work has been carefully compiled and corrected by
E. PENROSE JONES, Esq., late Assistant Post-Master of the
Cincinnati P. O., from the Records in this Department, and
other sources, and contains the most complete list of Post-
Offices especially of the Western, North-Western, and
South-Western States, yet published.

MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an octavo pamphlet of about 100 pages.
The entire matter is kept standing in type, and as the com-
piler is promptly advised of all New Offices, Changes and
Regulations of the Department, the information is corrected
up to the last day of publication, an advantage possessed
by no other work of the kind.

OBSERVE. That this list is arranged by States and Coun-
ties, making it especially valuable to business men. No
similar arrangement has been published since 1856. There
are 3000 more offices in this than in any book heretofore
issued. The Price is one-half that of any book of the kind
now published.

1750 Copies sent by mail (postage prepaid) to any
address, upon receiving Twenty-five Cents in Silver or
Postage Stamps. Five Copies sent for \$1.00, or Twelve
Copies for \$2.00.

Address,

C. S. WILLIAMS,
194 Walnut Street,
Cincinnati, Ohio.

WHEELER & WILSON'S



SEWING MACHINES.

W. M. SUMNER & CO., cor. Fourth and Wal-
nut Streets, second floor, Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky., Columbus, O.,
Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with
important improvements, at a reduction on former prices;
and to meet the demand for a GOOD, LOW-PRICED FAMILY
MACHINE, have introduced a new style, working upon the
same principle, and making the same stitch, though not so
highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALIKE ON
BOTH SIDES, impossible to ravel, and leaving no chain or
ridge on the under side, the economy of thread, and adap-
tability to the thickest or thinnest fabrics, have rendered this
the most successful and popular Family Sewing Machine
now made.

At our various offices we sell at New York prices, and
give instructions, free of charge, to enable purchasers to
sew ordinary seams, hem, fell, quilt, gather, bind, and
tuck, all on the same machine, and warrant it for three
years.

Send or call for a circular, containing all particu-
lars, prices, testimonials, etc.
Feb 12.

WM. SUMNER & CO.

1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th
Corby, Gossin & Co.'s make, for sale very
low by
TRAVER & AUBERY,
7 Public Landing

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND
Compound Steam Pumping Engine,



WOULD respectfully invite
the attention of RAILROAD
Companies, Manufacturer
Distillers, Miners, and the pub-
lic generally to these Pumps
as the best Pump now in use
and acknowledged by all who
have used them to be perfect—
are simple in their construc-
tion, compact, durable and not
likely to get out of order; well
adapted for Steamboats, Rail-
road Water Stations, Distill-
eries, Breweries, Furnaces,
Mines, Rolling Mills, Paper
Mills, Factories, Wells, Cis-
terns, Stationary Fire Engines, Garden Engines and for
all purposes where a Pump can be used. Also, for forc-
ing a large body of water to a great height or distance
rapidly.

Also, McGowan's Patent Ball Valve Pump, designed
for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings
Lead, Copper and Gas Pipe furnished at the lowest ma-
ket prices.

Full and perfect satisfaction guaranteed in all cases,
when properly put up according to directions.

Orders thankfully received and promptly filled at the
shortest notice.

SILVER MEDAL. (The highest prize) awarded
for our Compound Steam Pumping Engine at the late Pa-
cific Mechanics' Institute. June 18, 1855 — 1

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co.,
Pennsylvania, are prepared to execute orders for Street and
other Rails on terms favorable to parties wanting to pur-
chase Ag. 4, m. 6.

FREEDOM IRON COMPANY,

MANUFACTURERS OF

LOCOMOTIVE TYRE,
Engine and Car Axles, Pump and Piston Rods,
Bar of all Sizes,
And all Forgings for Railroad Machinery.

Lewistown, Milfin Co., Penn.

JOHN A. WRIGHT, Sup't.

This Iron is all made from best Juniata cold-blast char-
coal Pig Iron, refined with Charcoal in the old-fashioned
Forge Fire, hammered into a Bloom from which Iron is
hammered. The whole operation from ore to finished Iron
is conducted at our own Works June 9.

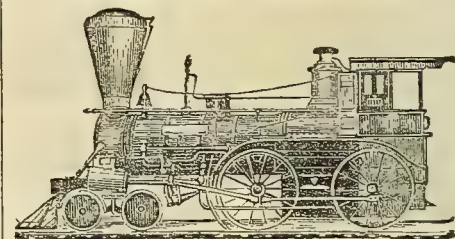
New Time Table

OF THE

NEW YORK CENTRAL R. R.

	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp.	7:00 A. M.	7:00 P. M.	7:00 P. M.
Mail	9:00 A. M.	12:50 A. M.	
New York Exp.	11:15 A. M.	9:00 P. M.	9:00 P. M.
Night Exp.	5:00 P. M.	4:00 A. M.	4:00 A. M.
Utica Accom'm.	6:00 P. M.	Ar. U. 10:00 P. M.	
N. Y. Mail	11:15 P. M.	10:00 A. M.	10:00 A. M.
	Leave Buffalo.	Leave Bridge.	Ar. Alb'y
New York Exp.	5:15 A. M.	5:15 A. M.	3:30 P. M.
Steamboat Exp.	8:00 A. M.	8:00 A. M.	8:00 P. M.
Mail			2:30 P. M.
Cleveland Exp.	6:00 P. M.	6:00 P. M.	4:40 A. M.
Cincinnati Exp.	11:00 P. M.	11:00 P. M.	8:30 A. M.
Utica Accom'm.			10:00 A. M.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotiv
equal in efficiency and durability to the best Eastern
manufacture. Also, Shaping and Slotting Machines
suitable for railroad shops. Also, all kinds of heavy
forging and casting done at short notice. Also, bolts for
bridges cut with dispatch.
ap. 20

MOORE & RICHARDSON.

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MORGAN, a distinguished graduate of West Point
and a practical Engineer, aided by an able Faculty.
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but more extended in Mathematics, Mechanics, Ma-
chines, Construction, Agricultural Chemistry and Mining
Geology; also in English Literature, Historical Read-
ings, and Modern Languages, accompanied by daily and
regulated exercise.

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Medicine, and Law, admit of selecting studies to suit
time means, and object of Professional preparation, both
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per half-yearly session, payable in advance.

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Franklin Springs, Ky." or the undersigned.

P. DUDLEY,
President of the Board;

Jan 5th.

The Railroad Record.

E. D. MANSFIELD, { Editors.
T. WRIGHTSON.

CINCINNATI:

Thursday Morning, Dec. 1, 1859.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

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A square is the space occupied by ten lines of Nonpareil.

One square, single insertion,.....	\$1 00
“ “ per month,.....	3 00
“ “ six months,.....	12 00
“ “ per annum,.....	20 00
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“ “ per month,.....	10 00
“ “ six months,.....	40 00
“ “ per annum,.....	80 00
“ page, single insertion,.....	15 00
“ “ per month,.....	25 00
“ “ six months,.....	110 00
“ “ per annum,.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,

Publishers and Proprietors.

The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

COMPELLED TO PAY A RAILROAD TAX.—The *Rome Sentinel* states that Judge Bacon has rendered his decision on the motion for a mandamus to compel the Trustees of Rome to sign the warrant for the collection of taxes on Saturday. The judge grants the motion, and issues a peremptory mandamus. The Trustees are therefore commanded to sign the warrant and have the tax collected to discharge the interest on the Ogdensburg and Rome Railroad debt.

GRADING.—The *Clinton Herald* says that the grading of the branch road, which is to connect the Galena and Chicago Railroad with the Clinton Railroad Bridge, was begun last week. John S. Wolfe, of Cedar Rapids, has the contract.

INDIANA CENTRAL RAILROAD.—Exhibit of a portion of the business done on the Indiana Central Railroad from the 15th of October to the 16th of November.

From Indianapolis—Corn 41,455 bushels; wheat, 28,138 bushels; flour, 15,700 barrels; tobacco, 415 bhd.

From way stations—Flour, 12,200 barrels; stock, 113 cars.

PROPORTION OF RAILROADS AMONG THE STATES.

In ascertaining what ought to be the proportion of Railroads in any community, we have nothing to judge by but experience. Some preliminary inferences, however, we may draw. We may infer fairly from the uses to which railroads are put, that they would *pay* best in a dense and wealthy population; but, on the other hand, that States with a large surface, and, therefore, a less dense population *need* them more. For example, a State like Illinois, whose density of population is not one-sixth of Massachusetts, *needs* railroads quite as much, and probably more, for the plain reason, that each individual, and town, is farther from any point of commerce, than they could be in Massachusetts. It is plain, therefore, that the *need* of a Railroad in a State, and its ability to *pay* its Stockholders, may be opposite to one another, or, exist in inverse proportions. It is for this reason that many roads have been built in the Western States, which do not pay, and could hardly have been expected to pay. They are works of *necessity* to the people, and they were managed to get in debt enough to build them. If the Bondholders have loaned more than was safe, it is their own fault; for they had all the means which others had of judging accurately, but, in fact, the Bondholders are almost universally secure. It is the Stockholders who have lost.

In looking to the amount of Railroads in the several States, in regard to proportion, we should consider both population and surface. The present aggregate of Railroads is not far from 27,000 miles. This is distributed in regard to surface and population, very nearly as follows; the numbers in the second column denoting the square miles of surface to *each mile of Railroad*; and the number in the third column, the people to a mile.

	Miles.	Sq. Miles.	Population.
Maine.....	475	60	1,300
Massachusetts.....	1,470	6	800
New Hampshire.....	480	18	700
Vermont.....	496	20	700
R. Island.....	65	20	2,000
Connecticut.....	618	18	700
New York.....	2,750	18	1,200
New Jersey.....	492	16	1,000
Pennsylvania.....	1,700	27	1,500
Delaware.....	85	25	1,000
Maryland.....	638	18	1,000
Virginia.....	1,220	50	1,100
N. Carolina.....	675	70	1,400
S. Carolina.....	734	40	1,000
Georgia.....	1,171	900	800
Ohio.....	3,000	13	800
Indiana.....	1,200	28	1,400
Illinois.....	2,750	20	600
Michigan.....	745	80	600
Wisconsin.....	650	80	800
Iowa.....	500	100	600
Missouri.....	450	150	1,500
Kentucky.....	350	105	3,000
Tennessee.....	800	57	1,400
Alabama.....	450	110	1,800
Mississippi.....	300	156	2,000
Florida.....	21	2500	4,000
Louisiana.....	350	110	1,600
Arkansas.....	—	—	—
Texas.....	120	200	2,500
California.....	22	7000	10,000
Minnesota.....	—	—	—
Oregon.....	—	—	—

Placing the States now according to the amount of Railroads, in regard to either surface or population, we have this result:

	Surface.	Population.
Massachusetts.....	1	7
Connecticut.....	2	4
Ohio.....	3	8
New Jersey.....	4	11
N. Hampshire.....	5	5
New York.....	6	17
Maryland.....	7	12
Vermont.....	8	6
R. Island.....	9	25
Illinois.....	10	1
Delaware.....	11	13
Pennsylvania.....	12	21
Indiana.....	13	14
South Carolina.....	14	15
Virginia.....	15	16
Georgia.....	16	10
Tennessee.....	17	20
Maine.....	18	18
North Carolina.....	19	19
Michigan.....	20	2
Wisconsin.....	21	7
Iowa.....	22	3
Alabama.....	24	24
Louisiana.....	25	22
Kentucky.....	23	27
Missouri.....	16	23
Mississippi.....	27	26
Texas.....	28	28
Florida.....	29	29
California.....	30	30

It will be seen that Massachusetts, Connecticut, and Ohio, stand the highest, both as to surface and population. Among the other States, there is great variation. Illinois, Michigan, and Iowa, stand highest as to population; but, quite low as to surface. The Southern States generally being large territories, stand at a low point. The extreme States, being new and large, stand still lower.

There are two points suggested by this table: 1st. How far may Railroads be carried, in regard to population? 2d. How far, on this principle, may Railroads be carried, in the extreme Western States?

In Massachusetts, Ohio, and Connecticut, there is one mile of Railroad to each 800 inhabitants. In Massachusetts and Connecticut, railroads average about six per cent. dividend. In Ohio, about four and a half per cent. In New Jersey, Delaware, Maryland, and South Carolina, there is one mile of railroad to 1,000 people. In these States, the roads are tolerable profitable. We may assume, that in States, with large towns, and commercial advantages, and such will be the case with those on the Ohio and Mississippi rivers, and one mile of railroad to 1000 inhabitants may be considered a fair proportion. It will be seen that Illinois, Michigan, Wisconsin, and Iowa, already have their full quota; and it is in these States, where there are a large number of unproductive roads. But, Missouri, Kentucky, Tennessee, etc., are largely deficient, some as to the proportion for population. Minnesota and Arkansas have none, and Iowa must have more, in order to carry the lines to the West part of the State. It is on the West bank of the Mississippi and to the South of the Ohio, that railroads will hereafter be chiefly made. In the States of Minnesota, Iowa, Missouri, Arkansas, and Texas, there will probably be constructed, in the next ten years, 10,000 miles of railroad.

In regard to surface, roads may be carried up to one mile for ten, *provided* they do not exceed one mile to 1,000 people. The last is the most important principle.

VIRGINIA AND TENNESSEE RAILROAD COMPANY.

FINANCIAL.

The reports of the Treasurer and Auditor show the receipts and disbursements for the last year, as also the entire receipts and disbursements from the organization of the Company to same period 30th June, 1859:

Last year commenced with a cash balance on hand of.....	\$38,906 66
Receipts from all sources during the year amounted to.....	1,049,652 84
Total available funds.....	1,088,559 50
The disbursements were.....	983,684 83
Leaving balance on hand.....	104,874 67
Less warrant out.....	62 50
Balance on hand.....	\$104,812 17

The receipts and disbursements from all sources, from the organization of the Company to close of last year, have been as follows:

Receipts.....	\$8,759,035 96
Disbursements.....	8,654,223 79
Balance on hand.....	\$104,812 17

The collections of the capital stock, unpaid at the commencement of the last year, have been:

Amount unpaid, 1st July, 1858.....	\$84,101 25
Of this sum there has been collected of individuals.....	\$1,249 80
Of the State of Virginia.....	30,525 00
	31,774 90

Amount remaining unpaid.....	52,327 25
Owing as follows:	
By individuals of original capital.....	\$19,652 25
Of increased capital.....	4,300 00
	23,952 25
By the State of Virginia of original capital.....	28 375 00
	\$52,327 52

The Board of Directors estimate that *fifteen thousand dollars* of the subscription will prove unavailable—say *six thousand dollars* from insolvent individuals, which will curtail your claims upon the State *nine thousand dollars*—that being the rate of payment by the State.

The temporary loan on the part of the State, referred to in this as well as other reports, is an advance by the State of the unpaid balance of subscription, which has stood as an interest bearing fund, until liquidated by the collection of individual subscriptions.

As collections are thus made and reported the Company receives a credit on this loan, in the ratio of the State's interest, say *three-fifths* to *two-fifths* of individuals.

The amount due from the State upon the stock, as shown by the Company's books, is.....	\$28,375 00
It will be observed that the State subscription is short of the chartered pledge, eleven shares, which subscription, however, was made during last year, but not reported in time to have the corresponding entries made on the Company's books. Add it here.....	1,100 06
And you have.....	\$29,475 00

As the amount due from the State, and it is the exact balance due from the Company on temporary loan.

The original chartered stock of the Company was *three millions of dollars*, of which the State subscribed *three-fifths* and individuals *two-fifths*.

By two subsequent enactments the capital

stock was further increased *two millions dollars*.

Of this increase the State subscribed *five hundred thousand dollars*, upon condition of its being made preferred stock, which was done as explained in report of 1856.

The privilege given for the remaining increase carried with it no agreement on the part of the State, to subscribe for any portion thereof.

The chartered capital is now *five millions of dollars*.

The capital stock of the Company now is, (including the additional subscription on the part of the State of *one thousand one hundred dollars* referred to above), as follows:

Held by the State of Virginia.....	\$2,300,000 00
Individuals.....	1,204,300 00
Making.....	\$3,504,300 00
And is thus classed:	
Plain stock.....	\$2,872,000 00
Guaranteed stock reported, 1854.....	132,300 00
Preferred stock.....	500,000 00
	\$3,504,300 00

The several kinds are held in the following proportions, to-wit:

Original capital:	
State holds plain stock.....	\$1,723,200
Individ's hold plain stock.....	1,148,800
	2,872,000
Guaranteed stock:	
State holds.....	\$76,800
Individuals.....	51,200
	128,000
Increased capital guaranteed stock, individuals hold.....	4,300
Preferred stock, State of Virginia holds.....	500,000
Total.....	\$3,504,300

The following is the amount and condition of the floating debt of the Company:

Amount due by bills and notes.....	\$153,752 18
Amount due by plain bonds.....	9,914 84
To individuals.....	88,454 49
To State for arrearage interest.....	292,622 03
To temporary loan.....	29,475 00
By Salt Works bonds.....	97,000 00
	671,218 54

RESOURCES.

Applicable to the payment of the above, independent of the future earnings of the Road, and the mortgage bonds on hand, are as follows, to-wit:

By bills and notes.....	\$12,512 16
From individuals.....	146,562 29
From capital stock.....	52,327 25
Twenty-four shares telegraph stock.....	2,400 00
Cumberland Gap Branch.....	3,087 73
Montgomery Coal Branch.....	809 38
Cash in hand shown.....	104,812 17
	322,511 68
Leaving balance.....	\$348,706 56

The payment of the floating debt may be thus divided:

Payable during the year ending 30th June, 1860.	
In first quarter:	
By Bills payable.....	\$93 332 98
To Individuals.....	30,400 00
	123,332 98
In second quarter:	
By bills payable.....	35,054 24
To Individuals.....	25,000 00
	60,054 24
In third quarter:	
By bills payable.....	16,260 04
To individuals.....	25,000 00
Salt Work bonds.....	45,000 00
	86,260 04
In fourth quarter:	
By bills payable.....	9,104 92
To Individuals.....	18,369 33
Half arrearages to State.....	146,311 11
	173,785 26
	443,432 52
Payable during year ending 30th June, '61.	

Salt Works bonds.....	25,000 00
Temporary loan.....	29,475 00
Half arrearages to State.....	146,311 01
	227,786 01
Total.....	\$671,218 53

The floating and funded debt of the Company amounts to three million six hundred and twenty-five thousand seven hundred and eighteen dollars and fifty three cents, and mature as follows:

FLOATING DEBT.

During the year ending 30th June, 1860.....	\$443,432 52
Ending 30th June, 1861.....	227,786 01
	671,218 53

FUNDED DEBT.

Third mortgage bonds, 6 per cent., due 31st Dec., 1865.....	\$431,000 00
Fractional mortgage, 6 per cent., due 31st Dec., 1868.....	23,500 00
First mortgage bonds, 6 per cent., due 31st Dec., 1872.....	500,000 00
Second or enlarged mortgage, 6 per cent., due 30th June, 1884.....	1,000,000 00
Loan from State, 6 per cent., due in 1887.....	1,000,000 00
	2,954,500 00
Total.....	\$3,554,500 50

With regard to the loan of *one million dollars* from the State, it may be proper to remark for the information of such shareholders as may not be apprised of the condition of State loans, to say, that this loan is made for *thirty-four years*—or a yearly payment of *one per cent*, is required as a sinking fund, which extinguishes the loan within that period. Therefore, by the payment of *ten thousand dollars* annually to the State, the Company, in effect, receives a credit for *twenty-nine thousand four hundred and eleven dollars and seventy-six cents*, which is *one thirty-fourth* part of the loan. *Seven per cent*, per annum is now regularly paid on this debt, which covers annual interest and sinking fund.

The present annual charge on the Company is, for interest on Salt Works bonds and funded debt, including sinking fund on loan from the State.....	\$191,740 00
Dividends on guaranteed stock.....	8,938 10
Total.....	\$199,678 00

The following statement is made of the expenditures during the last year, which, though found to be necessary, were not previously contemplated, to-wit:

Amount for buildings erected, equipment, etc., as stated under head of "Roads and Machinery".....	\$189,428 44
Amount Salt Works bonds, paid in advance of their maturity.....	6,000 00
Land purchased for depot purposes.....	8,325 00
Total.....	\$203,753 44

The floating debt of the Company has been considerably reduced, including *seventy-one thousand dollars* of the Salt Works bonds; also, all current interest on funded debt has been promptly met, and the current dividends *six per cent* on the guaranteed stock has been paid on call.

Under authority of the third resolution, passed at your last annual meeting, and to accomplish the object therein expressed, the Board of Directors put on sale the third or income mortgage bonds then on hand, and during the year sold *four hundred and eleven thousand* at an average of about *seventy-six and a half per cent*, of their face, the maximum price being about 80 per cent.

There has been sold in all to 30th June last, *four hundred and thirty-one thousand dollars*, and there remains on hand *three hundred and sixty-nine thousand dollars*. The remaining bonds could have been sold at *eighty* per cent. of their face; but should it be found necessary to dispose of them at all, higher rates are expected. Further sales, however, will be avoided unless the interest of the Company requires it, which is not now anticipated.

Whilst the road earnings of the last year have exceeded the estimates made by the Board in their last annual report, it is now evident that, but for fortuitous circumstances, the excess would have been much larger than now exhibited.

The expected Eastern and Western connections were not yet completed, by which the operations of the Road were still confined to local movements; the freight wholly so, and the passenger mainly until near the close of the year. And the shortness of the crop tended greatly to curtail the receipts, particularly in the last months of the year.

It is gratifying to find any excess of estimates under these circumstances, particularly so as it is but additional evidence of the great local capacity of the line, the resources of which are numerous and immense, and to make them available needs only the proper means for development, which are being regularly, though it is to be regretted, rather slowly carried on.

The road earnings for the present year, ending 30th June, 1860, were estimated, in the last annual report, at *eight hundred thousand dollars*.

The results of last year, with the attending embarrassments, now induce the Board of Directors to increase it to *nine hundred thousand dollars*, which they do with much confidence, in view of the fact that it is now almost absolutely certain that the last half of the year, at least, will have the benefit of full connections, both East and West, for freight and passengers by the most direct routes. This will give increased employment by means of through tonnage, at the season during which local business is *slack*. These considerations give confidence in also increasing the estimates of future earnings, say for the year ending 30th June, 1861, to *one million one hundred thousand dollars*, and 1862, to *one million two hundred thousand dollars*, and thereafter to not less than *one million two hundred and fifty thousand dollars*.

From the above data the following statement is made of the future operations of the Road, the liquidation of the debts of the Company, and the prospect of dividends.

In making estimates of this kind it is usual to take one half of the gross earnings for expenses. In the following *sixty* per cent. is allowed, using only *forty* per cent. as the net gain.

Amount of floating debt, after deducting resources, as per statement above.....	\$348,706 56	
Add for amount of resources, which may not be available.....	50,000 00	398,706 56
To which add current charges, interest, etc., to wit:		
Int. sinking fund on State loan....	\$1,000,000	70,000 00
Int. on first mortgaged bonds.....	5 0,000	30,000 00
Int. on fractional mortgage.....	23,500	1,410 00
Int. on second mortgage.....	1,000,000	60,000 00
Int. on third mortgage.....	431,000	25,860 00
Int. Salt Work bonds (six months)...	45,000	1,350 00
Int. Salt Work bonds (12 months)...	52,000	3,120 00
Dividend on guaranteed stock.....		7,938 00
		598,384 56
Deduct Road earnings.....	\$900,000	
Less, sixty per cent. expenses.....	540,000	360,000 00
Balance due 30th June, 1856.....	\$238,384 56	
Add current charges as above....	\$'69,678	
Less, int't Salt Works bonds, paid Dec. 21, 1859, (six months).....	\$1,350	
Less int't on \$32,000 bonds, Dec. 31, 1860.....	1,560	
	2,910	196,768 00
		\$435,152 56
Deduct Road earnings.....	\$1,100,000	
Less, sixty per cent. for expenses..	660,000	440,000 00
Surplus earnings 30th June, 1861....		4,847 44
Add Road earnings.....	1,200,000	
Less, sixty per cent. for expenses..	720,000	480,000 00
		484,847 44
Deduct current charges as above....	196,768	
Less, interest six months Salt Works bonds paid.....	1,650	
	195,208	
Yearly sinking fund to meet third mortgage bonds of \$431,000, due 31st Dec., 1865.....	90,000	285,208 00
		\$199,639 44
Out of which can be paid dividends.....		173,600 00
Net surplus 30th June, 1862.....		\$26,039 44
[The President then goes on to estimate earnings and expenses up to June 30, 1873, ending with a surplus of \$220,249 44.]		
These estimates and calculations are tedious, and may be irksome, but, independent of other considerations, they are necessary to show the ways and means of meeting your funded debt, which is a matter of great interest not only to you but to the public at large, with whom your securities are a subject of investment or traffic. It is, therefore, that they are given in order that they may be examined at leisure. They being the basis of the opinions expressed by the Board of Directors, are placed before you in detail, so that you can from them draw your own conclusions.		
These estimates are not expressions of speculative opinions, but deliberate conclusions fully justified by the past. If they be realized, the result will be the prompt payment at maturity of your funded debt, and up to the period to which these estimates extend, say 31st December, 1873, you will have paid as has been shown:		
The third mortgage, due 31st December, 1865..	\$431,000 00	
The fractional mortgage, due 31st December, 1868.....	23,500 00	
The first mortgage, due 31st December, 1872..	500,000 00	
Reducing your funded debt.....	\$954,500 00	
And paying your floating debt.....	398,706 56	
	\$1,353,206 56	
And have received in dividends.....	2,531,164 00	
Retaining a surplus of.....	220,249 44	
Making an aggregate of.....	\$4,104,612 00	

These figures seem large and may excite

doubts with some, but they are below the results of your own estimates, made however in a different way.

The opinion prevails generally, if not universally, that a double track along this line will soon be necessary to meet the wants of the country. All, therefore, who entertain this opinion can, of course, have no doubt that ample tonnage and travel will be furnished for the employment of the one track and your present equipment.

Two daily trains of freight and two daily passenger trains each way, is about the capacity of your present equipment, but below that of your road. Estimate these trains at twenty cars each for freight, and five each for passengers, and take the yield per ton of last year of five dollars and forty-seven cents, and three dollars and two cents for each passenger moved, and you have a gross earning of two millions three hundred and thirty-one thousand one hundred and twenty-six dollars, exclusive of receipts from mail and express service, which may be placed at one hundred thousand dollars—making a little under two and a half millions of dollars.

Take only one half of this, and you have an amount equal to the highest estimate of earnings in the foregoing statements.

The second or enlarged mortgage bonds of one million dollars, due 30th June, 1884, can be retired by setting apart *sixty thousand dollars* annually as a sinking fund, commencing in 1873, after all the preceding liabilities have matured and been paid.

The net earnings of *five hundred thousand dollars*, estimated as heretofore, will be ample to do so after paying the then current charge of interest and dividend on preferred stock, and yield you an *eight* per cent. dividend, leaving a surplus of *sixty-six thousand six hundred and fifty-six dollars* annually.

This debt being paid, the State loan only remains. That requires an annual payment of *seventy thousand dollars* for the three remaining years to cancel it, principal and interest.

During this period the same estimated net earnings will yield you a ten per cent. dividend and leave an annual surplus of *ninety-five thousand five hundred and seventy dollars*. You will then be free of debt, with an accumulated surplus of upwards of *one million dollars*, without including that of 1873.

With regard to the sinking fund to be created, the amount proposed to be set apart annually is based upon the usual plan of making investments at par, or loaning the fund and compounding the interest semi-annually.

The safest subject of investment for a *sinking fund* is the security or debt for the payment of which the fund is created, and it is the most proper; being permanent and subject to no uncertainties of speculation, there is no risk of its being unavailable. It stands against itself, and a simple cross entry guar-

antees a perfect settlement of the liability at its maturity.

The Board of Directors would of course avail themselves of any opportunities of purchasing the bonds of the Company at their market value or any other reliable securities upon the best terms, and whatever of discount may be thus obtained, would lessen the yearly amount to be drawn from the road earnings for the *sinking fund*, and to that extent increase the surplus or dividend.

ORIGINAL CONTRACT FOR CONSOLIDATION OF THE TWO MIAMI ROADS.

It is agreed between the Little Miami and Columbus and Xenia Railroad Companies, (now operating their roads in union under a written agreement, dated the 30th day of November, 1853,) of the first part, and the Cincinnati, Hamilton and Dayton Railroad Company of the second part, as follows:

First—The contract shall continue in force for twenty years, each party having the privilege to terminate it at, or after the end of the first five years, on giving twelve months previous notice to the other party, in writing, of their intention so to do.

Second—Fifty per cent. to be retained out of the gross earnings by each Company earning the same, for the expenses of the business done by such Company, and the remainder shall be considered net earnings for division between the parties.

Third—The net earnings of the parties (after deducting the operating expenses as aforesaid) including all the earnings and incomes of the several Roads operated by the parties hereto, as hereinafter provided, shall be aggregated, and divided between the parties as follows:—Seventy (70) per cent. to the party of the first, and thirty (30) per cent. to party of the second part, and be adjusted, settled and paid at quarterly days in each and every year. Such quarterly days to be fixed by the Executive Committee, (hereinafter named,) or by the concurrent resolutions of the Boards of Directors of the parties hereto; provided, that until such action is had, such quarter days shall be the second Mondays in February, May, August and November.

Fourth—The earnings and income which enter into the division named in article three, shall be those arising from transportation of Freight and Passengers, and all other earnings whatsoever in operating the Roads, inclusive of incomes for the use of engines and rolling stock on other roads, of rents of track when the rent is received instead of and for the Company's proportion of fares and also all other rents and incomes derived from the use of the depots, tracks and other fixtures by other Railroads, and also inclusive of the receipts, earnings, and income derived by either of the parties, as Lessees of any other railroad, or part thereof.

Fifth—Each Company as a party hereto shall furnish its own machinery, rolling stock, etc., and necessary assistants, officers and employees for doing the business of their Road.

Sixth—With a view to the maintenance of the present position of each Company in connection with the business of the country, and to enable each road to do that business most convenient and natural to it, and on joint account most economical to themselves and to

shippers, the General Eastern and Western passenger route and business shall be by way of the L. M. and C. & X. Roads, and the General Freight route for freight business from the Ohio & Mississippi Road and her connections, unless otherwise specially consigned, shall be by the way of the Dayton and Xenia to Columbus, and so of freights (unless otherwise consigned) from Columbus to the Ohio and Mississippi and her immediate connections.

Freights, local, to or from Cincinnati, shall be sent by the route preferred by the shippers and consignees, exercising their own judgment as to the proximities of the respective depots.

A passenger through train to be run daily to and from and between Cincinnati and Columbus, by way of Xenia and Dayton, with such times of arrival and departure at and from Cincinnati, and at and from Columbus, or Xenia, as will, in the opinion of the Executive Committee be most advantageous to the several parties, and not injuriously affecting the East and West passenger business, as heretofore provided for. Any tickets sold for either route shall be good on either line between Cincinnati and Columbus.

Seventh—An Executive Committee composed of the Presidents of the three Roads, parties to this contract, shall have the power and be charged with the duty of supervising and directing all necessary contracts to be made with connecting roads and lines, and who shall determine the policy to be pursued between them. The Committee shall also be charged with the general policy to be pursued by the parties to this agreement in reference to the business of their several lines, manner of keeping the accounts of each necessary to properly and fairly carry out this contract, and to whom each line of Road shall make monthly statements of their respective earnings.

This committee shall meet once a week, or as often as may be necessary, to promote and guard the interests of the several companies, parties hereto.

And upon all questions at any time arising as to the true, proper or legal meaning of this contract, or of any part thereof, or of the exercise of powers under the same, there shall be an unanimity of opinion before final action, and in case of such disagreement, the subject matter and, question of difference shall be referred to a disinterested umpire, whose decision in writing shall be final in the premises.

The Executive Committee shall cause a record to be kept of all their official appointments of outside agents, or employees, with the cost, charges, and pay, together with the incidents thereof, all contracts or agreements with other roads, and all other important and official acts, capable and convenient to be recorded, a copy of which shall from time to time be furnished to each of the respective Boards of the parties hereto, and the original shall be open to the inspection of each Director of the several Boards.

Eighth—Each Road shall be managed under its own organization, for through and local business, and have its own Superintendent, unless hereafter, and by the unanimous agreement of the three Presidents, concurred in by their respective Boards of Directors, it shall be deemed for the interest of the parties to have the superintendency arranged under one General Superintendent, and one or more Assistant Superintendents, when the salaries of each shall be paid by the parties, in the proportions of the divisions of net earnings before provided for.

Ninth—There shall be one General Ticket Agent for the said Companies, who shall be appointed by the Executive Committee, the payment of whose salary and office expenses shall be by the parties hereto jointly, but in proportion to the division of net earnings between them. All other Agents and employees of or for either party not necessary to the working and management of the ordinary business of the roads, such as all agents and employees abroad, and at any and all places, shall be jointly appointed, paid in proportion as aforesaid, and such agents and employees may be removed by the Committee or either of the parties hereto.

Tenth—The several Companies parties to this agreement, shall hold themselves ready to do business with all connecting roads and lines of roads, and whether the latter be by rail and water, or not, on fair and equitable terms, and all previously existing contracts between them, shall be strictly observed by the party to each contract; provided, as to the business of connecting with, through roads, or lines of roads, neither company, party hereto, shall honor manifests, or bills, or passenger tickets, from and over any other connecting road, or line, which by low, or under charges, directly or indirectly done, seeks to transport freight or passengers to or from Cincinnati, Dayton or Columbus, or other intermediate point on or over the line of road of either of the parties hereto. But all such freights and passengers will be transported at the regularly established rates of the parties hereto, and having just regard to their regular rates and business engagements with other connecting lines.

Eleventh—All through rates shall, from time to time, be fixed and maintained by the Executive Committee. They shall also, and from time to time, fix and maintain so much of the local rates of either of the roads of the parties hereto, as may be necessary in establishing through rates in connection with any other road, or for the purpose of mutual protection against any competing route, or line of road. But the rates to and from Cincinnati and Columbus direct, and to and from those cities by way of Dayton and Xenia, shall be the same.

Twelfth—Neither Company shall appoint, have, or in any way, directly or indirectly, maintain any outside agent or employee, other than by joint action, as provided for in article nine (9.)

Thirteenth—In the opinion of the parties, the connection of their respective lines with others centering in Cincinnati, in a common or union depot, or by connecting lines of railway, would be permanently beneficial to the trade and commerce of the city, add to the means of cheapening rates of intercourse and transit, and benefit the parties hereto, and all other lines in connection with the city of Cincinnati.

Fourteenth—It shall be the duty of the Executive Committee so to administer the affairs and business of each of the parties hereto as that each will continue to have its proper proportion as heretofore, but admitting and recognizing, as understood, an increase on the line of the party of the second part, by conceding to it, per article 6th, (and for economical results to both,) a large amount of freight business to and from the O. & M., now and heretofore done over the lines of the party of the first part. As a governing direction to the Executive Committee in the discharge of their duties, the object of the parties hereto, and in making the present agreement it is declared to be, to secure to the stockholders of the sev-

eral companies included, remunerative prices for the services performed on their respective roads, by greatly lessening the expense, with an increase of facilities for such service, and to the business of the cities connected with their lines, fair rates of transportation, and increased facilities for present and future business. Whilst it is not necessary, nor is it their purpose, to interfere with, or impose unnecessary and burdensome restrictions on any line of transportation, or travel, connected with the lines of road of the parties hereto, or with the cities at which they terminate, doing or desiring to do, a fair and legitimate business.

MEETING OF THE STOCKHOLDERS OF THE COVINGTON AND LEXINGTON R. R.

A meeting of the Stockholders of the Covington and Lexington Railroad was held at Cynthiana Monday. Some thirty or forty persons were present, representing a large amount of stock. Judge Carr, of Fayette County, was elected President, and A. J. Morey, of Cynthiana, Secretary.

A Committee on resolutions was appointed, of which Mr. Trimble was Chairman, who reported the following:

Resolved, That this meeting appoint an Executive Committee of the Stockholders of the Covington and Lexington Railroad Company, whose duty it shall be to take such steps as may be deemed necessary to protect and defend the interests of said stockholders.

Resolved, That in the opinion of this meeting said Committee should immediately prosecute an appeal from the opinion of Judge Goodloe, for the sale of the road, to the Court of Appeals.

Resolved, That an annual meeting of the stockholders be held in the city of Covington, at the time designated by the Executive Committee, to elect a Board of Directors for the ensuing year.

Resolved, That said Committee also invite a proposition from Mr. Bowler for a transfer of said road, under the sale made by the decree, to be submitted to the next annual meeting.

Resolved, That in the event of an application to the next General Assembly of Kentucky, on the part of the said claimant of said Railroad for a new charter, said committee be instructed to resist said application, and should a charter be sought, awaiting the decision of the Court of Appeals, that said committee be directed to require, as provisions of said charter, the appointment of a Director living in each county through which the road passes, and an equitable and just tariff of rates for passengers and freight, for distances carried by the Company, as may be deemed necessary to protect the public interest.

Resolved, That, in the event such a state of things should arise as to render it proper, said committee be empowered to invoke State aid in such form as the Legislature may deem best to preserve the control of said road, either to the State or the citizens of Kentucky.

The resolutions as reported by the Committee were unanimously adopted.

The committee appointed under the first resolution consists of Gen. Lucius Desha, Wm. Trimble, W. C. Lyle, Jas. T. Kennard, John W. Menzies.

A resolution was adopted inviting other stockholders to join in the movement to resist the sale of the road, and the Convention adjourned.

IMPORTANT RAILROAD DECISION.

A nice point of law is involved in the following case, reported in the *Utica Herald*, of Saturday last:

"A case was argued before Judge Allen, in this city, on Thursday, which presents a new question of law. It seems that, by virtue of a judgment in favor of the Ontario Bank, the Sheriff levied on the engines and cars on the track of the Black River and Utica Railroad at the time the judgment was obtained. Judge Beardsley and Charles P. Kirkland, mortgagees, to whom the road was mortgaged prior to the date of the judgment, now contend that the engines and cars are real estate and not personal property, and that the Sheriff's levy will not hold them as against the mortgage. It is conceded on the part of the Bank that, if the engines are real estate, the mortgage will hold them, and hence the single question is whether or not they can be considered that species of property. The case was argued by Judge Beardsley for the mortgagees, and F. Kernan for the Receiver of the Bank. As we have had a decision that hoop poles are real estate, engines and cars may perhaps be included in the same catalogue."

If rolling stock is real estate and covered by the ordinary mortgage of a road, what becomes of the efficacy and binding value of chattel mortgages? If a first road mortgage covers them, is not the making of a chattel mortgage a false pretence, a fraud? The whole matter of railroad mortgages is becoming very much tangled up, and is almost daily rendered more complicated by opposite decisions on very similar issues. Before one tribunal it is decided that a railroad mortgage is a lien upon the whole property of the Company, and when prosecuted to judgment and sale of the property, carries everything, road bed, rolling stock and franchise, to the purchaser, and in some quarters railroads have thus wholesale been conveyed to new owners. Then again, sales of roads have been arrested and the mortgagee defied in the collection of his claim, on the ground that the franchise of a road is an intangible substance and so segregated as not to be subject to levy and sale; indeed, in some instances it has been contended, that this franchise is so blended with the substance of a road as to be inseparable, and that even railroads are not subject to sale and transfer at all. Now it is asserted in this *Utica* case that the road and its appurtenances are all real property, thus wholly ignoring the distinction between road bed and rolling stock heretofore maintained by both borrowers and lenders, and entirely disregarding the question of franchise. The effect of all this agitation will be good in one respect, if no more, and that is, until the law of the matter is definitely settled, money can not, as heretofore, be borrowed on railroad projects, unexamined, and which are wholly unknown. It has been altogether too easy to borrow on railroad obligations. All that has been necessary was a plausible estimate on a basis that might or might not be reliable, a nicely colored map with a bee line for the proposed road, and an omission from the chart of all competing lines, or, if noticed at all, presented as so crooked and obstructed with grades as to be wholly impracticable. This, with laid-out towns at suitable distances, and the declaration, pro-

bably, that the land and timber would be given, has had the effect of attracting to new railroads millions of dollars a quarter of a century in advance of any public want, and which are now irretrievably buried and lost. While doubt hangs over the validity of railroad obligations, this inconsiderate lending will be likely to stop. Railroads will have to progress as the demands of business arise, and no faster. Another check to reckless railroad making would be found in paying for bonds and shares in actual coin. It is so easy to get a note discounted at bank or on the street, and so simple a matter to draw a check against a deposit in bank, that hundreds of thousands of dollars run into stock investments that would seek some more reliable security if capitalists were required to look at and count out in solid coin the amount of each of their purchases.

Few persons have any idea of the annual expense attending the repairs of railroads. In England, for instance, no less than 30,000 tons of iron are required every year for the necessary repairs of the tracks on different roads. Twenty millions of wooden sleepers are replaced annually, useless from decay. This item alone requires the felling of three hundred thousand trees, occupying five thousand acres of land.

BALTIMORE AND OHIO RAILROAD.

We have, by the favor of a special Baltimore correspondent, an early copy of the Report of JNO. W. GARRETT, President of the Baltimore and Ohio Co., from which we make liberal extracts. It is a document that will command very general attention among Railway proprietors and managers. It will be seen that the economies legitimately attained during the fiscal year reach the enormous sum of one million of dollars! Here is, indeed, food for reflection. It seems to settle the question of the remunerative nature of railroad property, for the year in which this great result has been achieved has not been one of general prosperity, but, quite to the contrary, a season of low prices and a reduced volume of business.

OF THE MAIN STEM.

The liabilities and assets of the Company are exhibited in the Treasurer's report A. The revenue and working expenses are shown in statement B.

The gross earnings of the main stem have been \$3,618 45, being a decrease, compared with the preceding year, of \$237,867 34.

The expenses of working and keeping the road and machinery in repair, have amounted to \$1,684,997 84, being 46.56 per cent. upon the revenue, exhibiting a decrease, compared with the previous year, of 19.07 per cent.

This marked improvement in the relation of expenditures to revenue, has resulted from economy of management. A careful and thorough system of supervision of the disbursements of the Company, embracing especially the details of the entire service, has led to many important reforms. Valuable effects must continue to flow from these improvements in administration so successfully inaugurated, if the system be vigorously maintained.

Whilst the gross revenue, in comparison with the last fiscal year, has decreased \$237,867 34, the reduction of working expenses has amounted to \$846,201 45; thus exhibiting an increase in net profits of the main stem, of the very satisfactory sum of \$608,334 11, being upwards of 6 per cent. on the capital stock.

As interesting in this connection, and furn-

ishing particulars of the reduction in expenses the following analytic comparative statement is presented.

COMPARATIVE STATEMENT OF THE REVENUE AND WORKING EXPENSES FOR THE FISCAL YEARS 1858 AND 1859.

	1858.	1859.	Decre.	Incr.
REVENUE.	3,856,485 79	3,618,618 45	237,867 34	
Gen. Expe's...	34,685 45	28,481 65	6,203 80	
Loss by Acci-				
dents, &c....	21,357 89	7,664 71	13,693 18	
Exp. Transp'n.	662,222 48	533,487 02	128,735 45	
Rep'r's Rll'w'y.	820,143 02	346,266 88	473,876 14	
" Wat. Sta.	11,677 90	7,349 99	4,327 91	
" Depots...	43,061 93	18,547 08	24,514 85	
" Bridges...	24,991 23	18,548 34	6,442 89	
" Telegra'h	3,413 87	2,277 70	1,136 17	
" St. Ma-				
chinery	38,310 84	24,342 84	13,968 00	
Watching—				
Cuts	32,873 30	30,763 59	2,109 71	
Tunnels.....	2,293 35	1,443 15	850 20	
Bridges.....	7,441 30	6,168 93	1,272 37	
Pump'g Water	10,357 18	9,917 33	439 85	
Repairs of—				
Locomotives.	372,849 92	281,458 16	91,391 76	
Dump Cars...	1,877 18	1,959 16	81 93	
Pass. Cars...	52,213 06	49,308 50	2,904 56	
Burden Cars	194,988 44	179,798 64	14,289 80	
Cleaning En-				
gines & Cars	52,469 54	39,661 95	12,807 59	
Conting't Exp.				
Mach. Dep't	2,851 60	3,149 25	297 65	
Fuel.....	97,624 03	73,517 36	24,106 67	
Preparing Fuel				
& fill'g tender	35,333 93	20,802 54	14,531 39	
Rep'r's of Snow				
Plows.....	2 79		2 79	
	3,331,199 29	1,649,997 84	846,582 68	386 63
			380 63	

Decrease of Working Expenses.....\$846,201 45
 " " Gross Revenue.....237,867 34
 Total increase of Net Earnings for the year, terminating Sept. 30, 1859, over the preceding year.....\$608,334 11

In consequence of the gradually improving condition of the North Western Virginia Road, and the increased economy in working, the advances to that Company have been reduced, as compared with the preceding year, \$40,581 20.

DIVIDENDS.

A semi-annual dividend of 4½ per cent. was paid in November, and the same in April last. A similar dividend for the past six months has been declared, payable on the 25th inst.

STREET RAILROAD CONNECTION IN WASHINGTON.

The early completion of important lines terminating in the vicinity of Washington, which will open very direct communications with the principal Southern cities, has caused the Board to look with anxiety to arrangements for perfecting connections between the Washington Branch and its Southern associates, in order thus to complete this great national route.

The tedious and expensive transfer that has heretofore existed has caused great annoyance to the immense travel using this line. As the entire country is interested in this improvement, the Board trust the requisite power for its accomplishment may be granted during the next session of Congress.

OF THE NORTH-WESTERN VIRGINIA RAILROAD.

The revenue of this road for the fiscal year has amounted to \$240,171 29, and the working expenses to \$198,270 58. This exhibit is accompanied by the remarks made at the close of the preceding year, viz: "In consequence of the incomplete condition of this road, arising chiefly from narrowness of embankments, verticle character of the cuts, etc., large sums that, from the difficulty of accurate adjustment, appear in the statement charged as repairs, properly belong to "construction"—Thus ac-

counting for the extraordinary working expenses.

The gross revenue is \$7,832 77 less than for the previous year; but as the comparative expenses have been reduced \$54,982 21, the net result presents an increase of \$47,149 44. The ratio of working expenses to revenue for 1858 was 102.12, and for the past year 82.55 per cent.

The report of Master of Road presents the outlays for securing and improving the condition of tunnels, and for additional ballasting, which have been directly charged to construction, viz: \$18,843 29. This sum is \$36,277 77 less than the amount advanced for construction for the previous year.

The large cost of working the road causes the entire equipment and machinery to be furnished, under the contract, for the past as for the preceding year, by the Baltimore and Ohio Railroad Company, without interest upon the capital so invested.

It will be noted that the expenditures in improving the road-bed exceed those of 1858 \$5,914 37, and that of bridges the excess is \$4,668 34. Whilst these outlays have been onerous, the Board have continued to pursue this liberal policy to ensure safety in operating the road, and promote improved results in future.

The large sum of \$16,290 85 has been saved in the expense of watching Cuts and Tunnels. This economy has been effected by the discontinuance of night trains, which have been found neither necessary nor desirable, under existing circumstances.

The Northwestern Virginia Railroad, it will be remembered, was commenced under the joint auspices of the City of Baltimore and the Baltimore and Ohio Railroad Company. The city originally guaranteed one and a half millions of dollars of its first mortgage, and the Baltimore and Ohio Railroad Company one million of dollars of its second mortgage Bonds. Since that period, exclusive of an additional guarantee of half a million of dollars of bonds, this Company has advanced to the Northwestern Virginia Railroad Company one million, seven hundred and ninety-five thousand, three hundred and twenty-six dollars, and twenty-nine cents.

Included in this advance, under the agreement with that Company, has been \$90,000 per year interest, paid on the bonds, for which the city is guarantor. This contract expires on 1st January, 1862, when more equitable arrangements for operating this road may be anticipated.

It thus appears that the great burdens connected with the completion of the enterprise have been borne, with trifling exception, by this Company. It is gratifying to state, that realizing these facts, and appreciating the value of this important auxiliary in advancing the commercial prosperity of Baltimore, the Councils of the city enacted an ordinance in June last, which was subsequently approved by the Mayor, appropriating 25 per cent. of the dividends to be received by the city for five years from that date, on its Stock held in the Baltimore and Ohio Railroad, to aid the Northwestern Virginia Railroad Company in securing and arching the tunnels on the line of its road.

Dividends of 6 per cent. will furnish \$52,500 per year for this most necessary and desirable work. An appropriation of a larger sum, so that these improvements could have been more rapidly constructed, would, in the judgement of this Board, have advanced the permanent interests of the city. As far as the limited means at the command of that Company will

permit, the work will doubtless be energetically prosecuted.

GENERAL REMARKS.

The aggregate revenues, working expenses, and net results of the Main Stem, Washington Branch, and Northern Virginia Railroad, for the fiscal years terminating respectively 30th September, 1858 and 1859, exhibit an aggregate reduction of \$929,958 05 in working expenses compared with the previous year; thus, notwithstanding the decrease of \$272,903 50 of gross revenue, accomplishing an increased net gain of \$657,054 55.

At the commencement of the year it was palpable from the general prostration of business, and the large financial engagements of the Company, that in order to produce satisfactory results to shareholders, and the taxpayers of the city and State, every judicious economy in management should be effected.

Accordingly, the attention of the officers of the Company was directed to careful supervision of economy of detail in the expenditures of their respective departments, and the great reform of reduced and slow speed with heavy burden trains, and moderate and safe speed on passenger train, was introduced.

The fruition of this system has been presented, and is alike most satisfactory and remarkable, although inaugurated during a period in which, in numerous cases, unprecedented low rates of transportation prevailed, and a serious conflict with the great rival Atlantic Lines was maintained effectively and successfully by the Baltimore and Ohio Company, in sustaining its cardinal policy of protecting and promoting the business interests of Baltimore.

The speed of heavy freight trains was reduced nearly forty per cent. viz: to eight and nine miles per hour, and of passenger trains, to twenty and twenty-five miles per hour.

In this connection the subjoined extract from the report of the master of Road, is interesting: "Of both the Main Stem and Branches, it is proper to remark that a general reduction of speed has produced a most favorable effect in maintaining our road at greatly diminished expense, as well as a great diminution in number and extent of casualties,

"Having used 4,986 tons of new iron rails, re-laying 53 miles of track, and 158,876 new white oak ties (being 5,979 more than were used the preceding year) with good stone ballasting, and having improved the slopes and drainage during the year, the entire road is now in better condition than at any former period."

Connected with the decrease of speed, has been an efficient system established by the Transportation Department ensuring promptness of transit and regularity of delivery which has given generally increased satisfaction.

The reduced prices of material required in the service of the Road, and the ability of the Company to purchase its supplies for cash on the best terms have contributed largely to the increase of profits.

The report of the Master of Transportation is unusually full and interesting. The details of the important economies perfected, and improved systems introduced in his department, are presented. The comprehensive review of the sources of business of the Road, accurate analyses of the local and through trade, and the history of the operations of the Department for the year, embrace much valuable information.

ENCOURAGEMENT OF LOCAL TRAFFIC.

The important and advantageous results of the policy of the Company, in accomodating

and developing every description of local traffic upon the Line of the Road, and its branches, are exhibited.

The revenue from passengers on the Main Stem shows an increase of \$8,319 19, all of which has been derived from the local travel. This increase is attributed to the enlarged facilities granted to commutation passengers, and the inducements systematically proffered for the use of round-trip tickets for short distances between various points upon the Line of the Road.

Steady effort has been made by the Company during the year, to establish a trade between the Local Stations and Baltimore and Washington, in marketing and the products of the dairy. A low tariff has been arranged, to induce the introduction of this system, so successfully obtaining on the New York and Erie, Reading, and other roads.

By reference to the abstract of tonnage carried one mile, it will be noted that the aggregate business of the Road exceeds that of 1858. This improvement has arisen entirely from the large expansion of the *Miscellaneous Local Tonnage*, which has increased 32,309 tons.

It is shown that, embracing Through and Local Trade, the falling off in Eastward tonnage is 16,899 tons, and the gain in the westward 25,940 tons, making an aggregate excess over 1858, of 9,042 tons, and actual increase in the tons hauled one mile on the Main Stem, of 1,870,460.

It is thus clear, as the actual transportation has been greater than for the preceding year, that the reduction of Revenue has arisen exclusively from the reduced and low rates at which the work has been transacted.

RECAPITULATION OF ECONOMICAL RESULTS.

The total Decrease of Working Expenses on the Main Stem and Branches, is	\$929,958 05
The reduction in the sum paid for interest, arising from the improved financial condition of the Company, resulting from the decrease of expenses, is	62,637 32
Making	\$992,595 37

It therefore appears, that, with a larger aggregate of service performed, the economies perfected have produced an improvement in comparative results, of nine hundred and ninety-two thousand, five hundred and ninety-five dollars and thirty-seven cents.

CREDIT TO PRESCOTT SMITH.

The Board perform an agreeable duty in tendering their cordial acknowledgements to the Master of transportation, Mr. W. P. Smith, for the able and successful administration of the affairs of his Department.

From the report of the Master of Machinery, it will be observed that all the Engines regularly in the Passenger and Freight service, have been, in pursuance of policy of the Company, altered to burn coal, with very economical and satisfactory results. The average cost of fuel on 18 Passenger Engines, which have been burning coal for the last six months, has been 2 8-10 cents per mile, whilst the same engines, when burning wood, cost for fuel, from 8 to 9 cents per mile.

COAL BURNING LOCOMOTIVES.

The principal contract for coal, delivered on the Company's cars at Piedmont, is made at 55 cents per ton of 2,240 lbs. The large comparative advantage of this Company over its rival Lines in this leading item of expenditure, can be readily appreciated.

The cost of fuel and its preparation, was in 1858	\$133,017 95
For do do do do do do 1859	94,319 40
Exhibiting a reduction of	\$38,698 05

ARCHED TUNNELS.

* The effect of the perfect arching, and entire completion of the Tunnels on the Main Stem, ensuring regularity and safety, and avoiding the use of extra motive power, has been most happy upon the business, and contributed largely to the successful working of the Road. The extraordinary exemption from accidents, due largely to the reduced speed of trains, and the careful system in the service is noteworthy. These combined causes act very favorably in lessening the wear and cost of maintenance of machinery.

BRIDGING THE OHIO.

The Board view with interest the subject of improving arrangements for the transfer of business over the Ohio river. It is desired that plans may be consummated at an early period, for suitable bridge connections with our Western allies.

CENTRAL OHIO & COLUMBUS & PIQUA LINES.

The completion of the Columbus and Piqua Railroad during the year, gives this Company an additional important and useful connection with Chicago and the North West, both for passengers and freight. Merchandise loaded in Baltimore can now be sent promptly through to Chicago with but one change of cars, and the benefits of this trade are already felt.

The improved condition of the Central Ohio Road, and the great promptness and regularity with which it has been worked, have aided materially in advancing the interests of the route. The perfecting of connections with new and important lines, thus opening, for business intercourse with Baltimore, large sections of country, is constantly increasing its value.

MARIETTA & CINCINNATI ROAD.

The Marietta and Cincinnati road has been much improved, and will be finished to a point opposite Parkersburg within ninety days, when the advantages of this line may be expected to be rapidly developed.

The Central Ohio road, the Marietta and Cincinnati and their affiliate lines, afford the most desirable and valuable connections with the fertile and populous regions lying between the Ohio river and the Lakes.

The Louisville and Nashville road will be completed within one month, opening a direct communication with the heart of the Southwest. The operation of this and other Southern and Western lines, combined with the superior advantages of Parkersburg as a port for the great river traffic, and the excellent location of Baltimore, will enable this Company to outflank their Northern competitors in the contest for the South-western trade.

THE FUTURE.

The return to the regular payment of semi-annual dividends, has been judiciously accomplished, and can hereafter be confidently relied upon.

With the incubus of floating debt removed, and abundant ability to meet conveniently all its engagements, including the large appropriations for increase of Sinking Funds, by which provision is made for payment at or about maturity, of its entire funded debt, a most satisfactory system of finance is presented.—*Cin. Eng.*

Only twenty-five miles of the Mississippi Central Railroad remains to be completed before the iron horse will run regularly through from New Orleans to Jackson, Tennessee.

MR. BOWLER AND THE COVINGTON AND LEXINGTON RAILROAD.

EDITOR OF GAZETTE:—Yourself and correspondent seem to have so imperfect a knowledge of the Covington and Lexington Railroad, that I send you all the reports of the company, from its commencement to the present time. Also, the circular, which was addressed to the mortgage bondholders, asking an extension on a few of their coupons, the object of which you understand no better than the affairs of the company. If you will examine these documents you will see that you have, ignorantly no doubt, done injustice to the past and present Directors. These reports very clearly show that it is with railroads, as with individuals, if they contract debts without the means of paying them, failure will certainly follow.

They also show that the directors were faithful. Their error was in having too much faith in the road. Under the influence of this faith they periled their private fortune, and mortgaged their property in the hope of saving it, and so far as the stockholders are concerned they have never been fully reimbursed for these individual sacrifices. If the purchase of the road was so great a bargain, they do not have even the slightest advantage from it, notwithstanding the assertions of your correspondents to the contrary; for I assure you, I am the exclusive owner, and they have no interest in it.

The road cost

4,135,571 7
And with the exception of the loss sustained on the sale of its bonds, and interest on temporary loans, amounting to
\$1,078,293 94

\$3,057,277 73

It cannot this day be built with cash for less. It is notorious that every contractor on it lost money. Compare its cost with any road terminating at Cincinnati, Hamilton and Dayton, for illustration, which was built with capital and made but little sacrifices on its bonds. Add \$200,000 for completion of the division between Paris and Lexington, and you see the construction of the two roads, striking out real estate and equipments, cost nearly the same. Hamilton and Dayton is sixty miles long. Covington and Lexington ninety-nine. The individual subscription amounted to but \$323,237. Counties subscribed \$650,000 in their bonds at par, which were sold at a large sacrifice. This is all the subscription the road ever had. There was stock given for right of way and to contractors \$321,800. The stock subscriptions were very slowly collected. The road could earn but little or nothing till completed to Falmouth, thirty-eight miles. Before it reached that place its means were exhausted, and to carry it there, the directors became individually responsible for \$288,000. Up to the time of reaching Falmouth, the earnings were only \$3,671 50, and its interest that year \$116,302 76. November, 1854, the year after reaching Falmouth, the gross earnings were \$87,964 38, leaving about \$46,000 net, and the interest the same year \$147,562 49. The endorsement of the directors now amounted to 667,788 08. The road broke down under this pressure, and went to protest. The next September it was finished to Paris, and the earnings were \$138,694, 11. Interest paid same year \$168,883.

At the annual election in December of that year, a change took place in the directory, by the resignation of the president and some of the directors. No report was made in 1856; this is the only year since the organization of the company, that there was a failure to make a report. At the annual meeting, December, 1857, a full, thorough and complete report of the affairs of the company was made to the

stockholders, (which see,) with this preliminary remark:

"The Directory entrusted with the management of your road feel that they owe you an apology for so long delaying to communicate the condition and working of the road, but owing to the manner in which the business has heretofore been conducted, they found it would be impossible to make a correct, comprehensive report earlier than the present is submitted and believing that you would appreciate the position of your present directory, and excuse the delay, they determined to make no statement until they could do so from the records of the office, comprehending the business of the company from its commencement."

Notice was then given of the suspension of paying interest on all of the bonds of the company, except the mortgage ones—and this meeting unanimously passed this resolution:

"Resolved, That this meeting endorse the action of the directors in suspending the interest on the bonds, as set forth in their supplementary statement, and they believe the directors of the past year have been faithful and industrious in promoting the interests of the company."

By suspending the interest on the unsecured bonds, the directory were in hopes they would be able to meet the interest on the mortgaged debt. In this they were mistaken, and it would have been better to have announced their inability to pay the mortgage bonds, without some help from the holders, for the report, then read to the stockholders, showed it could not be done. Their report shows they had

Cash on hand.....	\$8,104 48
Add the net earnings of the road for November,	\$20,685 00
	\$28,789 48

Interest on third mortgage, due the following December,.....	\$31,000 00
Due laborers,	\$6,184 43
Due for daily supplies.....	\$34,942 01
	\$92,126 44
Short.....	63,336 96

Net earnings of the road for December, June and February, were.....	\$40,758 00
---	-------------

Short March 1.....	\$22,758 96
Semi-annual interest due on that day on second mortgage.....	\$35,000 00
Short.....	\$57,758 95

This you will see by the published report of 1858, was the condition of the company, March 1, 1858. Now, what was to be done? By the resolution of November 14, 1858, they ceased to pay interest on \$870,500 of its bonds not secured by mortgage, and on the 1st of December following, the interest on \$600,000 third mortgage bonds laid over.

The interest on these amounted to.....	\$66,595 00
Short March 1, 1858.....	\$57,759 00 (as above)
Amounting to	\$124,354 00

At this time I came to the board.

In consequence of so long struggling to pay the interest, the road had been neglected, and now would require at least \$100,000 to be expended on it in the course of the year. In the course of the next month it had \$150,000, Income bonds maturing, and in four years, 260,000 first mortgage. It also had, including what was still due the directors, a floating debt unprovided for of \$143,000.

Notwithstanding this heavy load of arrearages, so much confidence had the directory in the future of the road, that they unanimously concluded to raise the money among themselves, and pay the \$35,000 interest on the second mortgage bonds, due March, 1858, then to make an appeal to the mortgage bondholders for temporary assistance. No appeal was made to the unsecured bondholders, as they were deeply interested in the preservation of

the property from mortgage creditors. With confidence in the justice of their application, and convinced that it was the interest of the parties to grant it, the directors advanced the required amount, and paid the interest and issued the circular which is now annexed. Before doing so, they consulted parties in New York and the west, who had a deep interest in the road, to see if any better course could be adopted. After much reflection they saw no better, and accordingly advised the one pursued. There may have been individuals who entertained views of this circular as expressed by yourself and correspondents. The board never knew or heard of but one, and your editorial of the 6th of October seems to be an echo of his expressions. No member of the Board has ever entertained any such idea. It carries with it its own refutation of such a conception. If the whole amount mentioned in the circular was required to put the road in order, how was the debt, which I have recapitulated above, to be provided for?

This communication is made in consequence of the insinuations in your issue of Saturday, over the signature of "Deferred Income."

Being the holder of \$147,000 deferred incomes, and all the deferred third mortgage, amounting to 263,000, both of which are a total loss, unless I can make it out of the road, which I shall try to do. I want with him "no judiciously packed committee, who will report right, and the thing be glazed over;" rather let the disaffected institute themselves into a police, and remove any doubts, if any exist. I think the stockholders, who have made these charges, should not have waited for an invitation from the board, but exercised the right that belonged to them, examined the books, vouchers, &c., for themselves. The directors are their servants, and if they have stolen their masters' property, they should be held to a strict accountability.

As one of the directory, and in the language of one of your correspondents, the "Memphistophilio" of the Board, I particularly desire the investigation, for I think it will be shown, that so far from the directors having sacrificed the stockholders, the stockholders nearly sacrificed them, and if the road could have been saved at all, it would have been by carrying out the circular, which I beg you will print with this.

This communication is now longer than I intended when I commenced it. In conclusion I must be permitted to say a few words of myself. The personalities of yourself and correspondent justify it.

My friends know, that, so far from wanting to own the road, I did my best to avoid it, if by so doing I could save my investment. The two principal competitors both knew my views on that subject. I did my best to bring all the parties into a fair compromise, and did not despair of it until eleven, P. M., the night previous to the sale. The difficulty was, the two other parties both wanted the control; I was willing to go in and let each share of the stock be represented—they were not. My representative on the ground did not make a bid until every Kentucky interest had retired from the field. The printed reports show this. The bidding was finally narrowed down to myself, and a company, not a member of which resides in the west. It was struck off to me in one of the fairest sales that could be made. Without giving me an opportunity of showing what I intended to do with it, you came out the next morning with so personal an attack, that one not knowing the facts would have inferred that I had robbed you of the property. Your article was reflected back by the disappointed Kentucky competitors at the sale, and taken

up by some unfortunate holders of the stock and bonds, in all of whose communications I have been held up as a most successful swindler, represented as coaxing the stockholders to put me into the Board, then through my influence stopped the interest, breaking down the securities; in this they would exhibit me as deliberately carrying out a prearranged scheme for ultimately buying up the securities.

So far from seeking it, the fact is, I was waited on by a committee and solicited to go into the Board, at which time the suspension of the interest had already occurred. I shall be happy to restore the road again to the stockholders. First appoint this committee; have a rigid and fair examination, and see if I obtained it with any of their money. When satisfied I did not, let the same committee examine my books and vouchers, and see what I really did give for the securities of the company, then reimburse me for the capital, with six per cent. interest—relieve me from the securities before the Court, and take the property. If they won't do this, I beg that they will permit me to dispose of it as I please.

R. B. BOWLER.

SOUTHERN PACIFIC R. R.

A meeting of the stockholders of the Southern Pacific Railroad was held at Louisville on Thursday and Friday. General LUCIUS DESHA was chosen President; W. L. GRADY, of Kentucky, and JOHN L. MOSES, of Tennessee, Vice-Presidents.

A Business Committee of seven was appointed, Cincinnati being represented by R. S. NEWTON.

The President of the road, Dr. J. FOWLKES, made a report to the Convention, in which he gave the following very flattering account of the present position of the affairs of the Company: "Your franchises have been preserved to you, the charter rescued from all peril, its debts paid off and all of them provided for satisfactorily to holders thereof; and your Company now stands not only free from embarrassment, but commanding the enthusiastic sympathy and interest of the citizens of that generous State which gave birth to this, the greatest enterprise of the age. The old feuds existing at the time of my report on November 25, 1858, have all been ended, and all parties are animated at this time by a spirit of unanimity in accomplishing the great objects of your charter. The only parties who now entertain any opposition to your Company are the men whose efforts to defraud you were detected, exposed and defeated—men whose noise is as valueless as that of any empty vessel."

President FOWLKES proceeds to say that he entered into a negotiation with J. EDGAR THOMPSON to accept the Presidency, and that that gentleman agreed to do so upon certain conditions which we have heretofore published, and which have already been complied with, in the main. Mr. Fowlkes then says:

Measures have been taken by means of sales of present stock, and by subscriptions, to raise the \$250,000 to be used for actual working means in constructing the road. I have learned that about \$100,000 of this amount has been already raised in Texas alone. \$150,000 are yet to be provided. And this is one of the objects of this Convention. This amount raised, Mr. Thompson accepts the Presidency. From abundant caution, Mr. Thompson sent engineers of distinguished skill to Texas to examine what has been already done. They have returned, and although their report is not written out, its substance is so far satisfactory that Mr. Thompson adheres to the conditions of the above letter.

The chief object this Convention, then, is the permanent organization of the Company. To accomplish this a prerequisite is the raising the sum of \$150,000 in cash, or its equivalent. Mr. Thompson then accepting the Presidency tendered him, it is for you to declare now who shall be your other officers. Gentlemen of high standing and practical experience have all been consulted heretofore in regard to even the Presidency of the Company if tendered to them. Samuel Tate, Esq., the late Governor J. C. Jones, for instance, and others. These gentlemen, and other leading railroad men in the Southern States, have expressed their cheerful co-operation with you in behalf of this work. Col. S. Tate has been placed at the head of the Land Department, who is second to none in the country as a man of ability, industry, and integrity.

On Friday morning the committee, to whom was referred the paper of Dr. Fowlkes, reported that they were unanimously of the opinion that the condition and prospects of the enterprise have, at no previous time, been so favorable as they are now.

1. All the debts of the Company have been provided for, and the Company stands free from liabilities.

2. The State suit has been *tried on its merits*, and the franchises of the Company are fully recognized and established by the courts of Texas.

3. The Stock list has been thoroughly purged by a judicial sale and transfer of the franchises and property, and they are now vested solely in those persons whose money has redeemed the Company from its peril. The stock of the Company is fully represented by its property.

The committee recommended that Dr. Fowlkes be requested to continue in the prosecution of the general interests of the road, by raising a further subscription of \$1,000,000, to be invested in labor wherewith the road is to be built, and that he continue to exercise all the powers of the Presidency until such time as it may suit Mr. Thompson to relieve him.

The committee embody their conclusions in the following resolutions:

Resolved, That a committee of three persons be appointed by the chairman, from this meeting, to take up a subscription of \$150,000, and tender the same to J. Edgar Thompson, in accordance with the suggestions of this report.

Resolved, That it is inexpedient for this Convention to consider the subject of the cut-off stock of this Company.

Resolved, That Dr. Fowlkes be requested to continue his invaluable services to this company in the manner indicated in this report.

Speeches were made by Messrs. Mitchell, Greely, Young, Deering, Clinton, and Dr. Fowlkes. General Richardson gave an account of his visit to Texas, and went into statistical calculation to show how the road could be built by the purchase of labor and the receipts of loans and land grants from the State of Texas. It was only necessary to raise \$250,000 to secure the services of J. Edgar Thompson as President of the Company, and, upon assuming the office, there would be no difficulty in obtaining the requisite amount of money to purchase labor.

Mr. Mitchell submitted the draft of a conditional stock subscription, terms of which, contingent upon the acceptance of J. Edgar Thompson, were the payment of ten per cent. in cash on the day of such acceptance and ten per cent. monthly, the second payment falling due sixty days after the acceptance.

Messrs. A. S. Mitchell, R. V. Richardson, J. D. Osborne, Wm. Burkhardt, and Wm. Terry,

were appointed appointed a committee, under the resolution reported by the Business Committee, take charge of the subscription list.

A resolution, expressing the thanks of the stockholders to Dr. Folkes for "the able, fearless and effective manner in which he has maintained their interests," was adopted and the Convention adjourned.—*Cin. Eng.*

MONETARY AND COMMERCIAL.

Since our last weekly review money matters have become a little easier. The decline in Exchange has produced an influx of currency, which has enabled the discount houses to better accommodate their customers. The demand, however, is yet fully equal to the supply, and rates remain without change.

Eastern Exchange is cautiously dealt in by the Bankers at $\frac{1}{2}$ buying and $\frac{1}{4}$ selling.

	BUYING.	SELLING.
New York Sight.....	$\frac{1}{2}$ @ prem.	$\frac{1}{2}$ @ prem.
Boston.....	par@ $\frac{1}{2}$ prem.	$\frac{1}{2}$ @ prem.
Philadelphia.....	$\frac{1}{2}$ prem.	$\frac{1}{2}$ @ prem.
Baltimore.....	par@ $\frac{1}{2}$ prem.	$\frac{1}{2}$ @ prem.
New Orleans.....	par.	$\frac{1}{2}$ @ $\frac{1}{2}$ prem.
American Gold.....	$\frac{1}{2}$ —	$\frac{1}{2}$ prem.

Missouri currency is $\frac{1}{2}$ dis.; Illinois, Wisconsin and Iowa, 2 dis.; Virginia, (except Wheeling) $\frac{1}{2}$ dis., and Indiana Free Banks $\frac{1}{2}$ @ $\frac{1}{2}$ dis.

The N. Y. *Evening Post* of Monday says, the Stock Market is again active to-day, and large quantities of railroad stocks have changed hands. The tendency of prices early in the day was decidedly upward, but at the close there is a material reduction in most descriptions.

The money market presents no new feature.

COUNTY BONDS.—The Philadelphia *Press* says: Allegheny County bonds advanced to 40 per cent. bid, mainly in consequence of a decision by the United States Supreme Court, in the case of Wood vs. Allegheny County, for coupons upon bonds, issued to Allegheny Valley, Chartiers, and Steubenville Railroad Companies. The defence was overruled in all the cases, and the court decided that the various acts of the Legislature authorized the issue of bonds in every case; that the bonds were legally issued, and that the plaintiff was entitled to recover. The Pittsburgh *Post* of 24th says:

"Judge Grier charged the jury in substance, that this suit was brought on coupons given for railroad subscriptions. The Supreme Court of the State have assumed the constitutional validity of such subscriptions, and that question is not one now open for discussion.

"It is not for courts to enquire whether the subscriptions were wise or unwise, but to enforce the law, and maintain the inviolability of contracts. Whatever regret there might be at the amount of debt that had been imposed upon the community for railroads, it is too late now to set up objections that ought to have been made before the bonds were issued, and have gone into the hands of innocent holders, who had advanced the money to carry on the work.

"The objections made in this case to a recovery were ably argued and overruled. A verdict was given for the plaintiffs for the amount of the coupons that have been given, and interest on the coupons from the time they were payable until the present time."

SIXTH MONTHLY REPORT OF WM. KEY BOND, RECEIVER OF THE C. & W. & Z. R. R. Co.—Wm. Key Bond, Receiver of the Cincinnati, Wilmington and Zanesville Railroad Company filed his sixth monthly report, in the Clerk's Office of the U. S. Circuit Court yesterday. We make the following abstract of it, viz:

GROSS EARNINGS IN OCTOBER.	
Passenger Business, Through.....	\$ 202 48
" " Local.....	5,797 56
" " Mail.....	828 10
" " Express, etc.....	377 60
Total.....	\$7,205 74
Freight " Through.....	\$ 497 48
" " Local.....	8,104 27
Total.....	\$5,601 75
Total gross earnings.....	\$15,759 25

OPERATING EXPENSES.

Ordinary Expenses.....	\$11,289 96
Extraordinary Expenses.....	4,460 29
Total.....	\$15,807 49
The items of extraordinary expenses are as follows:	
New Iron.....	\$3,671 88
Repairing damages by floods and do.	788 41
Bridges.....	4,460 29

The amount paid during the month for interest on real estate, and for repairs of engines, cars, etc., was \$235 02, making a total of ordinary and extraordinary expense, and amount paid on capital account of \$15,985 27.

CASH RECEIPTS IN OCTOBER.

Passenger account.....	\$6,591 62
Freight ".....	9,363 16
Sundries ".....	416 43
Total.....	\$16,371 21

Debts and liabilities contracted by the Receiver, (Wm. K. Bond,) and remaining unsatisfied on the 31st October, \$28,554 42. The Receiver says: "It is proper here to state that this amount of unpaid debt, arises principally from the present Receiver having paid three months' (February, March, and April, 1859,) road expenses, left unpaid by his predecessor."

GREAT WESTERN RAILWAY.—Traffic for the week ending 18th of November, 1859:

Passengers.....	\$21,435 914
Freight and Live Stock.....	18,235 73
Mails and Sundries.....	1,564 88

Total.....\$41,235 524
Total for the corresponding week of the year previous.....42,186 23

H. SHACKELL, Auditor.

Audit Office Hamilton.

The receipts of the Cleveland and Toledo Railroad for the third week in November were \$18,629—showing an increase over last year of \$1,125.

PACIFIC RAILROAD—NEW GOLD DISCOVERIES.

The accounts from the West are of a new gold excitement on the eastern slope of the Sierra Nevada. New discoveries show that a belt of 200 miles long is rich in gold and silver ore, of which considerable quantities already arrive at St. Louis. The ore at Gold Hill, Carson Valley, is said to yield from 500 to \$2,500 per ton, and the excitement is so great as to foreshadow a migration to all that region at least as great as that to Frazer's River, and with far better hopes of success. The first travelers, many years since, through that region made reports of gold washings, but they did not then receive the attention which experience has shown that such reports merit. The California discoveries were received with great incredulity ten years since, and many learned essays were published to show that gold never exists in the manner it was alleged to have been found. The receipts of the metal at the Mint was however a silent and convincing proof that would not yield to scientific theory. The popular mind is now prone to give credit to new discoveries, and no place is more likely to afford them than just that Eastern slope of those hills whose western front has been so prolific of the ores. The Spring will therefore witness an immense migration, which will explore the whole of that region between the western frontier and the Rocky barrier which forms the eastern boundary of California. The country, if now but little known, will soon become familiar to the tread of hardy adventurers, in whose track the iron rails will soon bear the omnipresent locomotive. Probably the gold of Pike's Peak and Carson Valley will do more towards constructing the Pacific Railroad than almost anything else which could occur, and reciprocally by its means a much more active development of the gold fields must take place. Ten years since the first discoveries of gold were made on the west of the mountains, and prodigious results have flowed from them. The decade closed with a reaction from the speculative excitement that the gold occasioned. With capital now very abundant, and speculative action in railroads and real estate run out, the new decade begins with fresh discoveries on the east of the mountains, and on the track of communication between St. Louis and the Pacific State which has grown up from the gold washings of the last ten years. These new discoveries are so

placed as to concentrate the new speculative action exactly on the track of the needed railroad. They, so to speak, grade the Pacific Railroad. There are those who estimate that the new fields will yield per annum more than the old ones, yet these latter have not deteriorated in their production. If then, within the last ten years, all those fields are to be open to the whole population of the United States by an easy railroad route, and the supply is to be 100 millions per annum, instead of 50 millions, operating upon a country already well supplied with capital, what may not be the result of such a flow of the precious metals? If gold is to depreciate in value, as has been vainly predicted for the last ten years, surely the elements of such a depreciation now exist in far greater force, and next decade may realize the wildest dreams of the depreciation theorists, the more so that silver is said to be as abundant as gold. If the new gold discoveries have no other effect they will perfect the Pacific Railroad, and that work of itself will have a vast influence upon business. The cry in California this year is, "what can we do with our wheat?" Instead of paying \$40 per bbl. as in 1853, for New York flour, they have now more than they can eat and no customers for the surplus. There are other elements of a vast commerce accumulating on that coast, and a railroad "running through a gold country," to connect the vast population that encircle the Pacific Ocean with the heart of the United States, must afford a means of development, the effects of which may scarcely be estimated. The activity of gold seekers in all parts of the world is at this time very great, and much success has hitherto attended their efforts. It is reasonable to suppose that the next ten years will see far greater results in other quarters than in the Western part of the American continent, and therefore the supply of gold, which has been from Australia and California 100 millions per annum for the last few years, will at least be doubled, and with that doubling a decided influence upon the value of property and of other commodities must result. India has hitherto absorbed as much silver as there has been gold produced per amount. If she continues to absorb as much silver as heretofore, there will in the new production be still a large accumulating surplus. The production of gold beyond a certain extent does not add to the useful capital of the world, but it has, as applied to money purposes, an important influence upon the debtor class. These all, in whatsoever shape their obligations exist, have promised to pay gold that they expect to procure from the products of their industry. If the gold becomes very abundant, they procure it far more easily for those products, and by so doing lighten the load of debt at the expense of the creditors. This is the most important result of the depreciation of gold, and applies as well to government debts and tax payers as to mortgagors and producers. The latter, out of debt, will not be much affected by any decline in the value of the precious metals, since relatively what they buy will cost as much more as what he sells improves in value, and the result is nearly the same. It is the existing debts and annuities that will feel the change in the value of that which they represent. The indebted governments of Europe will experience a sensible lightening of the load of taxation at the expense of the creditor class.

—Economist.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned
THEODORE DEHON,
no 13 10 Wal. at Broadway, New York

NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith
Branch of the Cairo and Fulton Rail-
road Co., Van Buren, Ark., Sep. 10, '59.

SEALED PROPOSALS for the graduation of the First Division of twenty miles eastward from Van Buren, will be received at this office until **Thursday noon, December 1st, 1859.** The work is divided into twenty sections of about one mile each, and proposals for either a part, or the whole of this Division may be made; but no bids for less than one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise. Estimates of work done will be made on the first day of every alternate month, and payments made on the first day of the month following; and fifteen per cent. of all estimates will be retained until the completion of the contract. Contractors desiring other terms of payment may bid accordingly, as the above terms are not positively settled.

The Company having a large amount of the finest Lands in Western Arkansas, will give preference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications may be seen, and all desired information obtained, upon application at the Engineer's Office, in Van Buren.

JESSE TURNER, President.

THE GLOBE.

THE OFFICIAL PAPER OF CONGRESS.

I publish now my Annual Prospectus of the Daily Globe and the Congressional Globe and Appendix, to remind subscribers, and to inform those who may desire to subscribe, that Congress will meet on the first Monday of next December, when I will re-commence publishing the above named papers. They have been published so long that most public men know their character, and therefore I deem it needless to give a minute account of the kind of matter they will contain.

The Daily Globe will contain a report of the debates in both branches of Congress, as taken down by the reporters, equal, at least, to any corps of short hand writers in this or in any other country. A majority of them will, each, be able to report, verbatim, ten thousand words an hour, while the average number of words spoken by fluent speakers rarely exceed seven thousand five hundred words an hour. When the debates of a day do not exceed more than forty-five columns, they will appear in the Daily Globe of the next morning, which will contain, also, the news of the day, together with such editorial articles as may be suggested by passing events.

The Congressional Globe and Appendix will contain a report of all the debates in Congress, revised by the speakers, the messages of the President of the United States, the annual reports of the head of the executive department, the laws passed during the session, and copious indexes to all. They will be printed on double royal sheet, in book form, royal quarto size, each number containing sixteen pages. The whole number will make, it is believed, between 8,000 and 9,000 pages, the long session for many years having ranged between those numbers, and the next session will be a long one. This I believe is the cheapest work ever sold in any country, whether a reprint, or printed from a manuscript copy, taking for data the average number of words of the long sessions since the year 1848. The average number of pages is 8,857, and the average number of words on a page is 2,297, consequently the average number of words of a long session is 9,291,772. As I have sold to subscribers that number of words for six dollars, it follows that they have paid six and one half cents for every 100,000 words I have furnished them, while I paid my reporters \$6.29 for every 2,397 words of this work in manuscript.

The coming session will, without doubt, be an unusually interesting one, because the candidates of the respective parties for President and Vice President of the United States will be nominated before it closes, and, therefore, the debates will be mostly on such political questions as it may be thought will tend to influence public opinion in regard to the persons to be supported for those offices, and the Globe will be, as it has been for many years, the only source from which the full debates of Congress can be obtained.

The Congressional Globe and Appendix will pass free through the mails of the United States.

TERMS:

For a copy of the Daily Globe during the session.... \$5 00
For one copy of the Congressional Globe and Appendix, during the session..... 6 00
For two copies of the Congressional Globe and Appendix, when ordered at the same time..... 10 00

No attention will be paid to any order unless the money accompany it. Bank notes, current in the section of country where a subscriber resides, will be received at par. The whole or any part of subscriptions may be remitted in postage stamps, which is preferable to any currency except gold or silver.

Washington, Oct. 27, 1859.

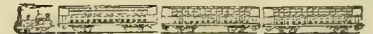
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Mathematical Instrument Makers
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Bloomington, Peoria,
Burlington, Quincy,
La Salle, Rock Island,
Dixon, Galena,
Prairie du Chien, St. Paul, and
St. Anthony,
And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANA for all the above points.

Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via

PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all

TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner Office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,

Gen'l Southern Agent, Cincinnati.

W. P. JOHNSON,

Gen'l Passenger Agent, Chicago.

Winter Arrangement, 1859-'60.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the West, South-West and North-West.

TWO TRAINS

Leave Wheeling daily at 12:35 P. M., and 10:10 P. M.

One Train leaves Parkersburg daily at 9:20 P. M.

Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.

Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2.

Time as quick and Fare as low as by any other ROUTE.

Inquire for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

E. F. FULLER,

General Western Agent.

L. M. COLE,

General Ticket Agent.

W. P. SMITH, Master Transportation.

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circular which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the rect is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet,.....	\$300 00
do do 350 "	335 00
do do 400 "	375 00
do do 500 "	450 00
do do 600 "	525 00
do do 700 "	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of the gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, as now in operation in several States, apply to

R. T. COVERDALE,

167 Walnut Street, Cincinnati, Ohio,

who has the exclusive right to manufacture and sell in the State of Ohio.

Feb. 24th, 1859.

APPLEGATE & CO.,
Booksellers, Publishers, Stationers & Blank
Book Manufacturers,
43 Main St. Cincinnati, O.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Booksellers, Country merchants, and others to our extensive stock of School, Classical, Theological, Standard, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the leading publishers, we are enabled to offer at the principal and lowest prices of Paper and Stationery. We can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

BOOKSELLERS,

Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, and Tea wrap-boards, Envelopes, Penholders, Copying Books, Ink and pens, Sealing Sticks, Macilage, Book rests, Bill envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files: Date Calendars, together with all other articles used in the counting-house.

Stationers,

To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly paged, including all sizes, from the small memorandum to the large Super Royal and Imp-bound in a great and of superior workmanship. Books made to order of any design, printed headings, and accuracy of ruling and durability of binding: all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

BLANK BOOK MANUFACTURERS,

We are prepared to Print and Bind books in any style desired, at rates as low as quality of work executed in this branch. Our facilities for the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Cards, Circulars, or other descriptions of printing, will find that we do such jobs despatch. Orders re-

Stereotype of any description that may be desired, can be executed or else. Our facilities for branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Cards, Circulars, or other descriptions of printing, will find that we do such jobs despatch. Orders re-

Publishers,

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, *Crisis*, *Compendium*, *Religion's Ancient History*, *Plutarch's Lives*, *Josephus*, *Spectator*, *Chain of Sacred Wonders*, *Familiar Science*, *Webb's Monitor*, *Soldier's German*, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

43 MAIN STREET, CIN.

W. HARVEY'S SAFETY JOINT For Coupling the Ends of "T" Rail PATENTED, NOV. 2, 1858.

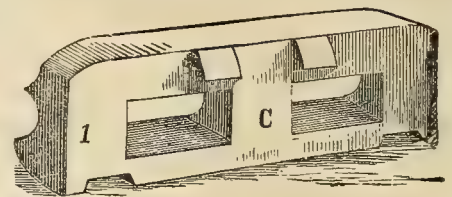


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outside of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

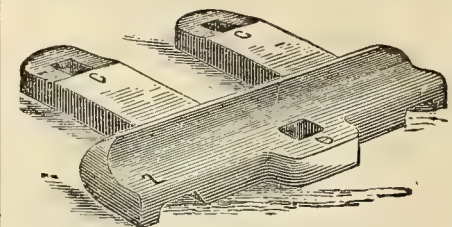
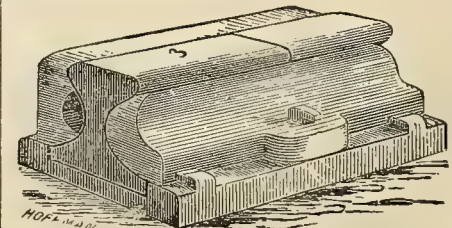


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that on one part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly free road, thereby doing away with the breaking of rails, wheels, and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
41 Jefferson-street, Albany, N. Y.
ON AGENT, Cincinnati, O.

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

SOLE IMPORTERS
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DENSERS for high pressure steam, with sea or
other bad boiler water, gauges, 3-cutter drills, counter-
sinks, tube end cutting bars, expanders, tube scalers,
steel wire and whalebone brushes, pull lever wrenches,
tubes—plain or enameled, screwed together for Artesian
Wells, Hollow Slabs for various purposes. Steel for
Rollers. THOS. PROSSER & SON,
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G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

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AND

TIRES,
For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent

FOR THEIR

CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE,

WITH OR WITHOUT AXLES.

WHEELS FITTED

To Hammered or Rolled Axles,

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

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JUST PUBLISHED

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For Post-Masters and Business Men.

CONTAINING

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and Territories, arranged by States and Counties; A
Complete List of all Distributing Post-Offices; Rates
of Foreign and Domestic Letter Postage; Rates of
Printed Matter, Transient and Regular; Abstract
of the Laws and Regulations of the Post-Office De-
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Late Assistant Post-Master at Cincinnati.

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READ THE FOLLOWING CERTIFICATE.

U. S. BLANK AGENCY, CINCINNATI POST-OFFICE, }
January, 1859.

This work has been carefully compiled and corrected by
E. PENROSE JONES, Esq., late Assistant Post-Master of the
Cincinnati P. O., from the Records in this Department, and
other sources, and contains the most complete list of Post-
Offices, especially of the Western, North-Western, and
South-Western States, yet published.

MAHLON H. MEDARY,

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SEWING MACHINES.

WM. SUMNER & CO., cor. Fourth and Wal-
nut Streets, second floor, Cincinnati, Ohio.

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We offer the Wheeler & Wilson Sewing Machine, with
important improvements, at a reduction on former prices; and
to meet the demand for a good, LOW-PRICED FAMILY
MACHINE, have introduced a *new style*, working upon the
same principle, and making the same stitch, though not so
highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALIKE on
BOTH SIDES, impossible to unravel, and leaving no chain or
ridge on the under side, the economy of thread, and adapt-
ability to the thickest or thinnest fabrics, have rendered this
the most successful and popular Family Sewing Machine
now made.

At our various offices we sell at New York prices, and
give instructions, free of charge, to enable purchasers to
sew ordinary seams, hem, fell, quilt, gather, bind, and
tuck, all on the same machine, and warrant it for three
years.

Send or call for a circular, containing all particu-
lars, prices, testimonials, &c.
Feb12.

WM. SUMNER & CO.

1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th
Corby, Gossin & Co.'s make, for sale very
low by
TRABER & AUBERY,
7 Public Landing

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

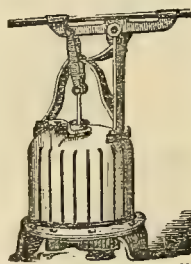
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite
the attention of RAILROAD
Companies, Manufacturer
Distillers, Miners, and the pub-
lic generally to these Pumps,
as the best Pump now in use
and acknowledged by all who
have used them to be perfect—
are simple in their construc-
tion, compact, durable and not
likely to get out of order; well
adapted for Steamboats, Rail-
road Water Stations, Distille-
ries, Breweries, Furnaces,
Mines, Rolling Mills, Paper
Mills, Factories, Wells, Cla-
rens, Stationary Fire Engines, Garden Engines and, for
all purposes where a Pump can be used. Also, for
forcing a large body of water to a great height or distance
rapidly.

Also, McGowan's Patent Ball Valve Pump, designed
for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings
Lead, Copper and Gas Pipe furnished at the lowest mar-
ket prices.

Full and perfect satisfaction guaranteed in all cases,
when properly put up according to directions.

Orders thankfully received and promptly filled at the
shortest notice.

SILVER MEDAL. (The highest prize) awarded
for the Compound Steam Pumping Engine at the late Fa-
Ohio Mechanics' Institute. June 18, 1855—1

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co.,
Pennsylvania, are prepared to execute orders for Street and
other Rails on terms favorable to parties wanting to pur-
chase
A2-4, m.6.

FREEDOM IRON COMPANY,

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods,

Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Millin Co., Penn.

JOHN A. WRIGHT, Sup't.

This Iron is all made from best Juniata cold-blast char-
coal Pig Iron, refined with Charcoal in the old-fashioned
Forge Fire, hammered into a Bloom from which Iron is
hammered. The whole operation from ore to finished Iron
is conducted at our own Works
June 9.

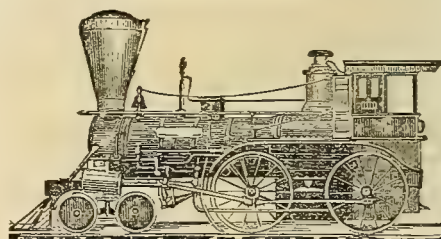
New Time Table

OF THE

NEW YORK CENTRAL R. R.

	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp...	7.00 A. M.	7.00 P. M.	7.00 P. M.
Mail.....	9.00 A. M.	12.50 P. M.	
New York Exp...	11.15 A. M.	9.00 P. M.	9.00 P. M.
Night Exp.....	5.00 P. M.	4.00 A. M.	4.00 A. M.
Utica Accom'n...	6.00 P. M.	Ar. U. 10.00 P. M.	
N. Y. Mail.....	11.15 P. M.	10.00 A. M.	10.00 A. M.
	Leave Buffalo.	Leave Bridge.	Ar. Albany.
New York Exp...	5.15 A. M.	5.15 A. M.	3.30 P. M.
Steamboat Exp...	8.00 A. M.	8.00 A. M.	8.00 P. M.
Mail.....			2.30 P. M.
Cleveland Exp...	6.00 P. M.	6.00 P. M.	4.40 A. M.
Cincinnati Exp...	11.00 P. M.	11.00 P. M.	8.30 A. M.
Utica Accom'n...			10.00 A. M.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotives
equal in efficiency and durability to the best Eastern
manufacture. Also, Shaping and Slotting Machines
suitable for railroad shops. Also, all kinds of heavy
forging and casting done at short notice. Also, bolts for
bridges cut with dispatch.

ap.20

MOORE & RICHARDSON.

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DIRECTED by a Board of Visitors appointed by the
State, is under the superintendence of Col. F. W.
MORGAN, a distinguished graduate of West Point
and a practical Engineer, aided by an able Faculty.

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but more extended in Mathematics, Mechanics, Ma-
chines, Construction, Agricultural Chemistry and Mining
Geology; also in English Literature, Historical Read-
ings, and Modern Languages, accompanied by daily and
regulated exercise.

Schools of Architecture, Engineering, Commerce,
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time means, and object of Professional preparation, both
before and after graduating.

The twelfth annual term is now open. Charges, \$102
per half-yearly session, payable in advance.

Address the Superintendent, at "Military Institute,
Franklin Springs, Ky.," or the undersigned.

P. DUDLEY,
President of the Board;

Jan 5th.

trade. Indeed, the inland commerce of America increases far beyond that of population, and is likely to furnish full employment for all modes of conveyance.

At the close of the year 1857, the length of railroad completed in the four principal countries of Europe and in the United States, and also the population of the several nations at the time of their last census, were as follows, recording to tables in the United States *Economist*:

	No. of miles.	Population last census.
Austria.....	2,086	39,000,000
France.....	4,59	36,000,000
Great Britain.....	9,619	28,000,000
Prussia.....	2,544	17,000,000
United States.....	24,290	27,000,000

The length of road to every million of inhabitants in each country is in the following ratio: Austria, 53 miles; France, 125 miles; Great Britain, 322 miles; Prussia, 149 miles; and the United States, 900 miles. From this comparison, it appears, that in the length of road to each million of the population of the United States is more by 251 miles than the aggregate of all the other countries compared; and that our mileage of railway, as compared with population, is greater than that of Great Britain by 180 per cent.

THE CLINTON RAILROAD BRIDGE OVER THE MISSISSIPPI RIVER NEARLY COMPLETED.—We learn that the railroad bridge over the Mississippi River, from the Illinois shore to "Little Rock Island," (thirty miles above the Rock Island and Davenport Bridge,) comprising seven spans, of two hundred feet each, (of McCullum's Patent Truss,) is nearly completed. All the stone piers and abutments are completed, and also five of the seven spans of the truss work. The last two spans are so far advanced as to warrant their completion by the early part of December, and the track is now being laid from Fulton to this bridge by the Galena and Chicago Union Railroad Company. It is now expected that the cars of the above road will cross this bridge by the middle of next month. This bridge also forms a connection for the "Illinois Grand Trunk Railroad" with the "Chicago, Iowa and Nebraska Railroad," at Clinton City, Iowa, and will be in connection with the railway ferry from the island to the Iowa shore, an important link in the connection of these three railways. This great bridge is being built by the McCullum (Bristol & Co.,) Bridge Company, of this city.—*Commercial*.

KRUPP'S CAST STEEL AXLES.—C. C. DENNIS, Esq., the Superintendent of the Buffalo and State Line Railroad, speaking of these axles, says:

"In regard to those Axles which I purchased of you for the Buffalo and State Line Railroad, my recollection is as follows: Their extreme length is 6', 6½" which is the proper length for 4, 8½" gauge. Their diameters

were 3½" and 3¾" inches severally. They were put in the Truck of a powerful engine, weighing over thirty tons. The weight on the Truck, including the weight of the Truck itself, was twelve tons. In this position they have been run 100,000 miles more or less, (probably more.) The Engine is a passenger one, and always run at a high speed. The Axles are half to three-fourths of an inch less in diameter than Iron Axles should be for the same service. They have never been sprung a particle. The bearings have been reduced by wear about one thirty-second of an inch. They have saved their entire cost each, in brass, in oil, and the saving of friction, and are now worth ninety per cent. of their original value. And, as they had run 80,000 miles, or more, when I bought them, they have already endured a service that would have destroyed four or five sets of best quality of Iron Axles, to say nothing of the lives and property that have been saved from destruction."

Thomas Prosser & Son, 28 Platt Street, New York, are the sole Agents for the United States.

Judge Drummond, of the United States District Court, at Chicago, has appointed James Robb, of New Orleans, and Charles Congdon, of New York, Receivers of the St. Louis, Alton and Chicago Railroad at the suit of the First and Second Mortgage Bondholders.

H. CLEMENT, Esq., has resigned his position as General Superintendent of the Ohio and Mississippi R. R., and E. W. Woodward has been appointed to fill the vacancy. A good appointment.

RAILROADS.—The Illinois Southern Railroad Company offers for sale county bonds of the counties of Wabash, Illinois, issued as a subscription to the Company. This road is now in course of construction from Vincennes, on the Wabash, to Mound City, six miles above Cairo at the junction of the Ohio and Mississippi rivers. Mr. William Curtis Noyes, of this city, has given his opinion in favor of the validity of the issue. He says:

That such Bond, and those similar to and executed simultaneously with it, are valid debts against the County in the hands of the Illinois Southern Railroad Company, or of parties purchasing them of that Company. The Acts of the Legislature of Illinois, referred to in them, fully authorize the County to issue them, and if these Acts have been completely complied with by taking the vote of the electors of the County, and complying with all the other requisites of the Act of which the issuing of the Bonds of the County Commissioners must be evidence, there can be no doubt that a valid obligation has been created against the County to the extent of the amount of each Bond, and the interest payable thereon, (Statutes of Illinois, ed., 1856.) The Bonds appear to have been executed in conformity with the law, and as each county is a corporation, they are properly executed in its name and on its behalf.—*Western R. R. Gazette*.

SOUTHERN PACIFIC R. R.

A pretty full meeting of the stockholders of the Pacific Railroad Company took place Saturday afternoon, at the Merchants' Exchange, for the purpose of taking into consideration the best means of promoting the enterprise of establishing a Southern Pacific Railroad.

Mr. Johnson was appointed President, and Mr. Macracken Secretary.

Dr. R. S. Newton addressed the meeting on the request of several members:

MR. CHAIRMAN AND GENTLEMEN: By request of several stockholder of Cincinnati, I visited Louisville last week to attend a meeting of stockholders in that city. Knowing the condition in which the stockholders of Cincinnati were placed—that, according to the rule adopted by the Board in May, 1859, of the stockholders who did pay up the loan, and submit to the reduction of their stock, were cut off, I proposed to bring a measure before the Convention by which our stockholders could be reinstated, which was not carried in the committee appointed; but in the report of that committee the following resolution was offered:

Resolved, That it is inexpedient for this Convention to consider the subject of the cut-off stock of this Company.

The reason that this was considered best at the time of that report was, that they had come together for the specific purpose of raising \$250,000 of a working capital required by Mr. Thompson ere agreeing to receive the Presidency of the road.

I went to the President and Mr. Richardson, and sent to Mr. Parker and the best stockholders, telling them they ought to send some one to Cincinnati to see if some satisfactory measures might not be taken. They consented; and we sent a note hence inviting them to send Col. Todd to Cincinnati.

It was then moved that the Secretary read the correspondence, which he did as follows:

LOUISVILLE, Nov. 27.

Dr. J. Fowkes, President Southern Pacific Railroad Company:

SIR:—We are anxious that you should send Colonel C. S. Todd to Cincinnati, for the purpose of meeting the Cincinnati stockholders, for arranging some plan by which they may save their stock, as well as to assist in the sale of the balance of stock. We think all the misunderstanding, then, may be removed, and every one will now come up and sustain the action of the company. Yours,

R. S. NEWTON,
M. F. CRIGLER.

LOUISVILLE, KY., Nov. 28.

MESSRS. NEWTON AND KRIGLER—*Gentlemen*: In compliance with your request, I have prevailed on Col. C. S. Todd, late Vice-President of the Southern Pacific Railroad Company, whose devotion to the great and true interests of its stockholders has made him a faithful, energetic and unwavering co-laborer, to protect the Company and its stockholders from first of June, 1858, to the present time, to make a visit to your city, and to open afresh stock-books for a few days; again, to explain fully the condition of our affairs, as well as the management and the present policy of the company, including his and my entire administration, in which he has so fully and zealously, ably and honorably participated, and who is entitled to quite as much of the general sentiment of congratulation and thanks from our stockholders as I am! Having more interest at stake peculiarly than he had, I have doubtless been actuated more by *selfish* and *pecuniary* considerations in my toils and struggles, than my

worthy and noble associate Col. Todd, or perhaps than other of my associates. He has worked without salary almost, governed by a most high sense of duty and principle, looking alike to the stockholders and his fellow-laborers, the State of Texas and the public! He has been always on duty, willingly working.

It is, therefore, gratifying to be able to send, as you request, Col. Todd, who is fully posted with the facts of our common administration, the policy of the company, and its present condition, and with the true character, motives and objects of the "harpies" who have plundered the Company in the past, and whose calumny of myself and associates is but the stratagem of men guilty of corrupt acts which they would thus try to conceal. Of these, out of your midst, I may name C. C. Mills and Thomas B. Lincoln, who, from malice and speculations defeated by my resistance, have assailed me privately and publicly, as well as the company. I here pledge myself, on my return to Texas, to arraign them before the bar of the public for dishonorable acts, not only toward this company, but toward other interests and parties, upon proofs as full as the evidences before you against the integrity of Samuel Waggoner or the guilt of the absconding J. M. Conwell. At the time above specified I shall be ready to enter into details, but for the present content myself with charging C. C. Mills with the barefaced attempt to plunder Southern Pacific Railroad by a sale of his vote as a Director for about the sum of \$180,000 for himself and associates, and that his present calumnies are the result of his defeat in the attempted fraud.

To your stockholders, as well as all others, I have desired and labored faithfully to perform my duty. They have my sincere sympathy, knowing how they have been misled and deceived by those whose true and real characters were not fully known or developed to them.

Ohio furnished much money for this enterprise in its conception—her citizens have evinced their correct appreciation of its magnitude and grandeur, its practicability and its nationality—hence amid defamation I denounced and attempted an expose of Conwell, Westcott, Waggoner & Co., that your stockholders might be secured and protected with our paying faithful adherents to the enterprise. While beset by the wicked and corrupt as indicated, we have been unfortunately annoyed by weak, incompetent and blundering friends, who have broken down, fallen in the pathway, and on the way side, proving almost as injurious as "the corrupt and heartless revilers" of the enterprise: one falling from weakness; another blinded by ignorance; and another besotted by whisky, proving themselves "clay in the hands of the potter," ready shaped to the mold of the designing and unprincipled. We pity, we commiserate and we forgive all such—while we do this, our duty may hereafter require of us a full exposure of some of this class, in order to guard the interest of the Company. We have a full list of many such—some of whom fancy themselves concealed, as the ostrich with his head under the bush and his body exposed. They have fallen as indicated—predicted evil, and now seeking to effect it, to be renowned as prophets. To such, we say: *Beware*, your "sins will find you out," bringing punishment as surely, sooner or later, as light bodies ascend and heavy ones fall to the earth by the laws of gravitation.

Col. Todd will visit you, give full information of all facts, and leave you to such action and such course as you may deem wise and

just to yourselves, to the Company and the occasion.

Very respectfully,

J. FOWLKES, *President*,

After which Col. Todd was invited to address the meeting, which he did as follows:

I do not know that I can introduce my remarks better than by referring to the remark made when the Allies entered Paris, at the conclusion of the Napoleonic war: "Europe now reposes in the arms of her legitimate sovereigns." In one respect, we may apply this to our Southern Pacific Railroad, for it, too, now reposes in the arms of its legitimate sovereigns. At our last meeting, a suit was pending with the State to forfeit our charter; and a large amount of debts remained unpaid, for which it was being sued, and we had no small share of distrust in this city. With regard to the Road, our condition has greatly improved, and to an extent that, I hope, will remove all distrust. The original stockholders are working the road, and paying for the work, and the funds sufficient for the next twenty-five miles.

That which indicates the real strength of the company is that the procuring of the required two hundred and fifty thousand dollars has been effected; and there is now every prospect that the road under the guidance of Mr. Thompson will progress rapidly, and be completed within ten years; and, if we secure the proposed contract from Government.

I do not know how far it is expected that I shall go into details concerning the road. The late administration, which dictated the affairs till June, has voluntarily retired from office, with a view to secure the election of Mr. Thompson; and in order that they might not be in the way of his appointing his associates. There could be no higher evidence of the purpose of the late administration to remove all distrust than the securing of the services of the first railway man in United States.

Mr. Bradley—Is there a certainty of his having accepted the Presidency?

Mr. Todd—The conditions of his acceptance given by him, and reiterated in a letter received during the sitting of the Convention, will be presented to and accepted by him within ten days. Patents will soon be obtained for two hundred and fifty-six thousand acres of land judiciously located; and there is a report from the surveyor going to show the value of the land.

With regard to the loans, a very ingenious article appeared in the *Gazette*, signed "W.," stating that the public domain of Texas was of no value; that the loan to railroads existed only in name; and that the cost of construction would amount to more than \$40,000 per mile; and that in Texas they can scale a debt or steal a road in the most workmanlike manner.

Never was there a more foul-mouthed libel uttered against a government and people. What are the facts? Texas came into the Union nominally owing a debt of ten millions dollars. The most of the scrip constituting this debt was issued by the government at a depreciated value. After it was issued it depreciated still further in value, and continued to depreciate until much or most of it was bought up at four and five cents in the dollar. Texas proposed to pay it all at what was issued, and finally settled with the creditors at *seventy cents on the dollar*. All the debt for which she had received a full equivalent she paid dollar for dollar, notwithstanding the Congressional debt bill which legally relieved her from so doing. What other country has ever paid her revolutionary debt so liberally? What other

has been more liberal to those who served her in the hour of need?

The School Fund of Texas is made up as follows:

1st. The money for every acre of land taken up goes to the Common School Fund.

2d. There are \$2,000,000 of United States laid aside for the same purpose.

3d. One tenth of the annual revenue of the State.

4th. Four leagues of land to each county, amounting in the State to five hundred leagues.

5th. Nine out of ten of all the alternate sections of railroad surveys.

Of the money in the treasury, one-half is reserved for the railroads West of the Trinity River, and the other half for those East of that stream. Of the fund reserved for the roads East of the Trinity, amounting to twelve or fifteen hundred thousand dollars, not a dollar has been drawn, and before it is exhausted we have reason to anticipate that, from the sale of lands and other sources of revenue, there will be an ample fund to meet the requirements of railroad companies. But two or three companies are competitors for this loan with any prospect of success, and not one of them, except the Southern Pacific, is likely to have any road completed under two or three years. There is nothing, therefore, to prevent the Southern Pacific Railroad Company, under a vigorous prosecution of the work, from receiving the full benefit of the loan to the Trinity River; and if it should fail then, the resources of the Company will be amply sufficient to dispense with it. Had such men as Mr. Todd continued to demonstrate the increasing prosperity of the company, and the wonderful facility afforded by nature of the level lands through which it was intended to construct the road. He also remarked that the State of Texas did not, as asserted, issue certificates at sixty cents per acre, but at one dollar; and that which lay along the line of the road was valued at one dollar and quarter.

There are ten hundred miles of a natural road. The whole road is but sixteen hundred miles, eight hundred to El Paso, and eight hundred more to San Diego. There is but one place where the grade is about forty feet, and the rest is but fifteen or twenty, and, sometimes, none at all.

Gentlemen, we all feel that this is an enterprise of such magnitude, so far beyond our conceptions of ordinary matters, that we are considered as visionaries, and have suffered from this consideration. I have suffered in the opinions of grave leaders of banks, some of whom will come to us for capital to keep them. I may not live to see it; but most of you will. Great enterprises have always been received with distrust. What was the fact in regard to Fulton, asking for opportunity to show he could propel boats by steam? What was the fact in regard to Clinton? Nobody supposed his projected canal would ever be finished; but it was finished; and Fulton and Clinton will go down to posterity when noisy politicians shall have been forgotten. See Columbus trying to reach the Indies; but stopped by the very continent over which this road will travel. The protection, too, which this road will afford to the States of the Pacific, in a military sense, securing them against invasion by foreign navies. Were the Pacific States invaded by England or France, we would have to expend more treasure for their recovery than would build three such roads.

In regard to this enterprise, gentlemen, we should all do as General Taylor recommended after the battle of Buena Vista. General Wool

was overcome with ecstasy, and, meeting the old General, exclaimed: "General, what a victory!" The old General replied, in his quiet way: "We never can be defeated when we all pull together." This, applied to our road, renders our having it as certain as that the nation must and will.

Dr. R. S. Newton then address the meeting on request of Mr. Bradley:

MR. CHAIRMAN, AND GENTLEMEN: In the apportionment of stock to be sold, \$50,000 worth of it was to be sold in Ohio. I was appointed to sell it. It must be taken up by the 10th inst., if sold at all.

It was with a view to this, I went to Louisville. I found there that there was little prospect of selling it in this city, and thought that some arrangement might be made with the company. In consequence of the misunderstanding among the stockholders, I did not here offer stock. The plan I proposed was that they adopt some policy by which the stock holders of Cincinnati, who had been cut off, might save their stock. The plan adopted is that they comply with the demands of the company, and take an amount of the new stock equal to that which they hold. They say that notwithstanding the money they obtained from Ohio, they have not derived that assistance and strength which they should have done. If their agents had been unfaithful, innocent stockholders should not suffer on account of dishonesty or bad management. Such agents had tended to destroy the confidence of the community, and shake the trust of the company in the stockholders. Some of the agents and parties connected with the enterprise, as soon as they found that they could no longer steal from the company, commenced vilifying its managers.

The individual who signed the article in the *Gazette*—W. M. Westcott—then in this city, now in Texas, made an application to the President of this road—Dr. Fowlkes—for a position and advantages over other stockholders, that would have damned any man that acceded to it; and yet from the moment of the President's saying that no man but a rascal would accept it, he has warred against the President and the Company. He told me that he would rather lose all his stock than see Mr. Fowlkes succeed with his enterprise.

Mr. Mills, another gentleman, has been issuing circulars, vilifying the Company and its managers because the company refused to admit a claim of \$180,000, which he trumped up against it—a claim unfounded and unjust. This gentleman subscribed ten millions to a company in Texas, in order to secure the grants now held by this Company, when he had not ten cents.

Mr. Lincoln, also to whom the company paid large fees for services, came to this city, co-operating with Westcott in denouncing the company. He afterwards visited New York, and showed to Mr. Post a manuscript which he threatened to publish unless Mr. Post paid him \$550; it was the same article afterward published in the *Gazette*. That is Mr. Lincoln. This is the kind of men the company has had to contend with—this is what has produced distrust among the stockholders.

President Fowlkes visited this city once or twice, and left Governor Todd here, who remained one week, to convince the stockholders that the company were doing all that was right, and promoting the interests of the Pacific Railroad. They failed in doing this, and in consequence their stock stock has been cut off.

With the exception of the few who paid installments and loans, by sending it directly to

Marshall Texas, or to Mr. Crigler, of this city, the stockholders are cut off.

The only proposition the company would entertain is, that the loan be paid of fifty cents on the share, and that the stock be reduced one-half, and the purchase of an amount of new stock equal to that of unredeemed stock, which those stockholders held.

The President said that though he had predicted this would be the result, nearly a million of stock had been thus cut off.

If the proposition heretofore stated, be not accepted within ten days, there will be no chance for further arrangements.

I have no doubt the road owes not now a dollar; the first section of the road is built, which entitles them to receive six thousand dollars from the State of Texas, and sixteen sections of land for every mile; this more than enough to build the next section of the Road.

Mr. Thompson, writing from Philadelphia, on the 21st of November, says:

The extension of your line, it seems to me, affords the most practicable, if not the only route over which a railway can be constructed between the Eastern States and California, that will meet all the requirements for a great national highway between the Atlantic and Pacific Oceans, within the territory of the United States. Such a work has become a public necessity, and must be commenced at an early date. The stake involved is too important to sanction its commencement upon any basis that will not secure its uninterrupted progress.

I am anxious that the fifty thousand dollars worth of stock should be sold, and that within the given ten days. Some twenty thousand is already promised. All stockholders holding receipts from Mr. Crigler, and who have not forwarded their stock to Marshall for reissue, can do so at any time, he having paid over the full amount to the company. Mr. Tate never received any moneys, and the amount in the hands of Mr. Conwell is not known.

Mr. Bradley then offered the following resolutions, which received the unanimous approval of the meeting:

WHEREAS, The multiplied difficulties which have heretofore embarrassed the condition of the Southern Pacific Railroad Company have been happily arranged by the termination of all litigation, as well by the State of Texas as by the two companies claiming to be the Southern Pacific Railroad Company; AND WHEREAS, The debts which led to these difficulties have been paid off, and the road is in the possession of the original stockholders, and the several conditions required by the Hon. J. Edgar Thompson, previous to his acceptance of the Presidency, have been complied with; AND WHEREAS, Many of the stockholders in this city have been deceived and misled by those real characters were not fully known to them, and that a just appreciation is entertained of the magnitude and importance of this great national enterprise, realizing the fact; be it, therefore,

Resolved, That we rejoice in the present prosperous condition of the Company, and will aid, as far as our means may permit, in all proper efforts to insure its successful completion, by the purchase of the amount of stock allotted to Ohio.

Resolved, That we feel a deep sense of gratitude and admiration for the generous resolution of the late administration of the Company to secure the acceptance of Mr. Thompson as President, even though effected by surrendering positions in the Company; that we anticipate from the eminent reputation of Mr.

Thompson the best results in the progress of the road and the value of the stock, and that we will unite in all suitable means to procure protective legislation from the State of Texas, which has given this noble enterprise to the world, and in combined efforts to obtain all constitutional aid from Congress toward a work which will cement the Union and secure the commerce of the world.

Resolved, That the thanks of the stockholders are due to Dr. Jephtha Fowlkes and Colonel C. S. Todd as officers of this company, for the able, fearless and effective manner in which they have at all times maintained their interests, effecting a complete and favorable revolution in the affairs of the company, affording a brilliant prospect for the future.—*Cin. Enq.*

MESSAGE OF THE GOV. OF TEXAS.

Gov. RUNNELS, of Texas, in his Annual Message to the Legislature of that State, says:

Nearly one-half of the two millions appropriated, the interest on which is set apart for purposes of education, has now been loaned to Railroad companies and drawn from the Treasury under the Act of September, 1856, and although secured by bond and mortgage on the road beds, it is useless to deny the truth that a feeling of insecurity pervades a large portion of the public mind. This grows out of the apprehension that the companies will not meet their engagements promptly, and that the Legislature may at some subsequent period relieve their condition, and finally, under the pressure of combinations, relinquish both principal and interest to the corporations. This apprehension is strengthened by the example of other States in a similar condition, as well as by the past action of our own Legislature, both of which afford sufficient premonition of the danger to be incurred. It is a fact not to be questioned by any discriminating and informed mind, that the influence of the corporations is greatly on the increase, and that, perhaps, it already exercises a more controlling effect on the legislation of the State than all others combined. Viewing the subject in this light myself, I feel it to be my bounden duty to recommend, if possible, some measure which will present, by any possibility, the occurrence of such a calamity. No other presents itself to me than an amendment to the Constitution prohibiting the interposition of the Legislature for their relief. This is a question which appeals so directly to every feeling of self-preservation and duty, to every sentiment of philanthropy, patriotism and justice, that I can see no good reason why it should not be submitted unhesitatingly to the people for their action. It is true the corporations may oppose it, but surely they can not be sufficiently strong thus early to exert a controlling influence over the action of the Legislature on this subject, to endanger its adoption, if submitted by that body to the people. In conclusion of this important matter, I have only to add, that if it be deemed worthy of consideration, it should not be delayed beyond the termination of your present session.

The subject of internal improvements, and especially that branch of it which relates to the building of railroads, continue to increase in importance, and will do so until the wants of our varied commerce and agriculture shall have been supplied with the facilities of ready transportation to market. Continually and in regular progression for the past six or eight years private interests have from different motives become involved, until there is now good

reason for the opinion that there are few counties in the State, some of whose citizens are not directly and personally interested in some one or other of the railroad schemes projected in different portions of the State. These, in connection with the fact that the State is representing in her behalf the whole people, and upon certain prescribed conditions, is become the greatest contributor, should afford sufficient incentive, to induce your most calm and deliberate consideration of the whole subject.

While I can without compromising any former opinion, invoke every reasonable aid to promote the advancement of the infant and struggling enterprises which are so soon, if well conducted, to constitute the great leading arteries through which our commerce is to flow, I should be wanting to every sense of duty, if I did not again warn the Legislature of the consequences of unwise and improvident legislation in relation to them. This has been the fruitful cause of unnumbered evils in the past, and its continued repetition will unnecessarily involve new and perplexing complications to those which already encumber the subject. I have most earnestly to advise the adoption of all prudent and just measures for the protection not only of the public, but of private stockholders against abuse of privilege and imposition by their managers. That this does exist in some instances in a manner culpable in the highest degree, disreputable to the State and injurious to the honest paying and legitimate stockholder, carrying along with it, the never failing consequences of disappointment and distrust, is too patent to require the introduction of proof for confirmation. The adoption of measures for its correction and future prevention can by no possibility whatever, result in injury to such companies as have by legitimate efforts and fair dealing entitled themselves to support and confidence. This policy is calculated to forearm and strengthen and destroy those that are or may entitle themselves to any measure of public justice; for without confidence, no corporation can long exist. Nor should they be permitted to do so. Obedience to law should be the indispensable condition, and if it is not the policy to demand "indemnity for the past" it should at least be to require "security for the future." The strictest and most binding restraints are the only means of reaching such as abuse the trusts confided to them, by perverting franchises with which they have been but temporarily and conditionally invested, to private instead of public purposes, for which they were alone entrusted. In the absence of these, where speculation is the moving cause, every motive of fulfilling the object of their creation will be rendered subservient to that alone. Promises will continue to be made, building up public expectation but to be broken, leaving them to languish in hopes deferred. The most approved commentators have taught that corporations under the best regulated systems, are great though sometimes necessary evils, and will it not be most unwise of those who knowing will not profit by their teachings. Our own Supreme Court have decided that the authority having the right to create, has also that to control. It is with you to say whether this shall be done. The remedy is in your power—it rests in your hands. It is you who can make and unmake, who can grant and refuse at pleasure, but the people, our common constituents, the representatives of whose honor and interests you in part are, expect that the prerogatives with which you are invested, will be exercised with wisdom, firmness and impartiality, regardless of every

private and personal consideration for the public weal and for that only.

My own duty on this subject, without favor and without regard to consequences, has been performed. I informed the Legislature when I resumed my official responsibilities, that I should endeavor to execute the law against such as were found disregarding it. Two suits have been instituted, one against the Southern Pacific Railroad Company (for disobeying the law requiring their annual report and other causes,) for forfeiture of their charter; and another against the Texas Central Railroad upon a question of forfeiture arising under the provisions of the Act to encourage the construction of Railroads by donations of land. The first mentioned was tried by the District Court of Harrison county, at the Spring term, A. D., 1859, and decided in favor of the Company. That decision has been reversed by the Supreme Court upon points of law clearly showing the right of the State to prescribe and enforce such measures of regulation and control as the public interests may at any time require. I have no official information of the result of the suit upon a rehearing of the case before the District Court. It is reported to have been again decided in favor of the Company. I am, however, satisfied, if the proof could have been made, and public justice had been done, the result would have been different. The history of that Company, with its multifarious abuses, has reflected discredit upon the other enterprises of the State and done injury which it will be impossible to repair. The decision of the Supreme Court debarred the issuance of further instructions from this office. In that of the Houston and Texas Central Road, it was intended, if judgment had been rendered in favor of the State, to have suspended its execution, until it had been ascertained whether the Company had complied with the provisions of the Act passed February 4th, 1858, granting them an extension of time for the completion of the second and third sections of the road, and if complied with, then to exercise the power of remission with which the Executive is clothed. The provisions of the law have been complied with, and the suit directed to be discontinued upon payment of costs by the Company.

I fully concur in the opinion expressed by the State Engineer in his report, "that the State should have some controlling influence in the administration of the companies' affairs," and invite attention to the suggestions made on that head. Whether these will be sufficient may admit of some doubt. The State is a contributor to the extent of fully one third of the legitimate cost and value per mile, of almost every one of these improvements, besides lending to the companies over one-third of the cost of construction. The whole people of the State are, therefore, much the more largely interested parties, and the question arises, if it may not be proper for their interests to be represented in the Board of Directors, by appointment of the Executive, of a limited number, under such rules and regulations as may be provided by law. It is not assumed that this could be done without the consent of the companies, but as a condition to amendments asked by them (if deemed advisable,) the object could be effected. I must again repeat the assertion, that the imposition of additional conditions and safeguards for the better protection of the honor and interest of the public, whenever they may be required, are by no means intended to act prejudicially to those deserving of public favor, and need be attended with no such consequences; and I respectfully urge the removal of any such

conditions with which companies may be encumbered, not found to promote that object.

STATE AID TO RAILROADS.

EXTRACT FROM THE MESSAGE OF THE GOVERNOR OF GEORGIA.

In my annual message to the last Legislature, I gave it as my opinion that it would be good policy for the State to lend her credit to aid in the construction of such other railroads as may be necessary to the more full development of her vast resources, *provided* she be made perfectly secure, beyond doubt, against ultimate loss. I still entertain the same opinion. In lending her aid in the construction of a road, I only propose that the State endorse the bonds of the company, after a reasonable proportion of the road is first completed, for a sum sufficient to purchase the iron to complete the rest, as fast as the company, at its own expense, shall have first graded the road and laid down all the timbers and superstructure, ready for the iron.

For the purpose of securing the State against loss, on account of this liability, I propose that she take and retain a mortgage or statutory lien upon the entire road, as well as the part completed before her liability was incurred as the part completed afterwards, with all the superstructure, rolling stock, fixtures, franchises, and appurtenances of every character belonging to the company, with the right to sell the whole after sixty or ninety days advertisement, whenever the company fails to meet and promptly pay any installment of interest or principal due on said bonds. And should any portion of the State's liability remain unextinguished, after the sale of the road, I propose that the whole deficiency, whatever may be the amount, be divided among the solvent stockholders, in proportion to the number of shares owned by each, and that the Comptroller General, under an order from the Governor, issue execution immediately against each, for his proportion of the deficiency, to be levied and collected by the sheriff of the county in which the defendant resides, or of any county in which he may have property. This would, in my opinion, make the State amply secure. Indeed, it is not probable that she would ever have to call upon the stockholders to make up a deficiency, after the sale of a road; as it is not reasonable to suppose that any company of sensible men, simply because the State would agree to endorse their bonds under the very binding restrictions above proposed, for a sum sufficient to purchase the larger part of the iron, would ever invest their capital in grading the and building a road which would be of so little value when completed, that the whole road and all its appurtenances, including the iron upon the entire track, and all the rolling stock, would not bring, if sold, a sum sufficient to pay for only part of the iron for the price of which the State would be liable.

Capitalists do not usually invest their money where they not only expect no dividends or incomes, but the loss of the principal, with an ultimate liability to future additional loss; consequently, it is not reasonable to suppose that the stockholder in any company, under the proposed plan, would undertake to build a road, and receive the State's aid by the endorsement of their bonds, unless they were satisfied that the road was a public necessity, and that the stock, after the road should be completed, would pay reasonable dividends.

The law, if passed, should be a general one, giving to every company in the State, engaged in the construction of a railroad, the same aid, subject to the same liability. It may be ob-

jected, that the terms upon which it is proposed to grant the aid are so onerous that no prudent company would avail themselves of its benefits, and that no encouragement would be given by the proposed plan to the development of the resources of the State; and it may be asked, what are the advantages of the State aid, under this plan? To this it may be replied, that the company, with this State's endorsement upon its bonds, can sell them at par in the market, and thereby save itself from the ruinous loss which it would have to bear, should it be compelled, by its necessities, as such companies often are, to expose its bonds in the market, without such endorsement, for the purpose of raising money to complete its roads. Many companies, which are now doing a prosperous business, while constructing their roads, were compelled to sell their bonds at sixty cents on the dollar, to raise money with which to complete them. Had the bonds of such company had the proposed endorsement, they would have commanded par in the market, and thus over one-third of the cost of construction would have been saved to the company. As an illustration, suppose it will cost \$600,000 to build a road between two given points, and the road, if built, would be of much public utility, and do much to develop the resources of an interesting section of the State, and a solvent company, without the cash at present, undertakes to build it upon credit by the sale of its bond, as such roads are often built, the bonds must be offered in the market, and will bring only sixty cents on the dollar. It will cost \$1,000,000 of bonds to raise the \$600,000 in cash. When due, these bonds must be redeemed by the company at par. It will, therefore, cost the company \$1,000,000 to build the road. But, supposing the State endorses the bonds; they will then bring par; and \$600,000 of the bonds will bring \$600,000 in cash. The Company, in that case, would have but \$600,000 of bonds to redeem; consequently, it would cost them only \$600,000 to build the road. The State's endorsement would, therefore, be worth \$400,000 to the company. The State would remain perfectly secure, and have her resources greatly developed, and the lands of her citizens in the vicinity of the road much enhanced in value, which would increase not only the aggregate wealth of the people, but the amount of taxes due the State.

Without the endorsement of the State, the road would not probably be built. Before the company would undertake to build it, the stockholders, as prudent men would calculate the per cent.; it would probable pay in dividends after its completion; and they might be satisfied that it would pay eight per cent. upon the cost, if could be built for \$600,000, and be willing in that case to incur the liability and proceed with the work. Should it, however, cost \$1,000,000 to the same road, it could then pay in dividends from the same amount of business, but little over half of 8 per cent., and in that case, they would refuse to incur the liability or proceed with the work. Consequently, the road would not be built; the resources of the section would not be developed; the price of lands would not be raised, and the amount of tax paid into the Treasury would not be increased. Hence, I conclude that it will be a wise policy on the part of the State to grant the aid upon these terms, that no prudent company will receive it until the stockholders are satisfied that the road will pay when completed, and that the aid will be very valuable to a company engaged in building such a road.

It is sometimes said that in justice to the railroad companies already in existence, the State should not aid or encourage the building

of other roads which may come in competition with those now in operation. Some of these companies are now making very large profits, and while I desire to see them prosper, and would not wish to see their dividends reduced below a point where the stock would be reasonably profitable, no matter how much other interests might be thereby promoted, I am unwilling that such sections of the State as are without railroads should be denied their benefits on the ground that the large incomes of some of the wealthy companies now in existence might be reduced by giving these sections an opportunity to participate in the advantages which would result to them from the construction of other roads. Indeed, I entertain no doubt the interests of the people requires that the number of roads be increased till no one shall have a monopoly of the business of any very large portion of the State, provided that each shall be left with sufficient business to make its stock reasonably remunerative. The greater the competition between the roads the lower will be the freight and fare, and the better for the interest of those who travel and ship freight over them. When there is no competition, for the purpose of accumulating larger incomes, the freights are usually placed by the company at a very high figure, and the shipper must bear the loss.

Again, I deny that any company has a right to complain that injustice have been done it by the State, should she permit or encourage the building of such roads as the interest of her people in different sections require, which do not in any manner violate the chartered rights of such company. Most of our railroad charters contain guarantees to the respective companies, that no lateral road shall be built within a certain number of miles of the road of the company to which the guaranty is given; say twenty miles as an instance. These corporations claim that the charter is a contract between the State and company, and they cling with tenacity to every chartered right given them by this contract, and exercise it, if profitable, no matter how onerous its exercise by them may be to other interests in the State. They should, therefore, be content with the contract, and should not be heard to complain when the State exercises rights reserved by her when she granted to them their charters. The State, in the case above supposed, as an instance, when she granted the charter, guaranteed the company an exclusive right over a strip of her territory forty miles wide. With this guaranty they were content, accepted the charter, invested their money, and built the road. The interest of a large number of persons outside of the limits embraced in the guaranty probably afterwards requires that they have a road; the State encourages its construction and it is built. What injustice is done to the first company, and how have they been deceived? They have the full measure of their rights, and the full benefit of what they insist upon as their contract. It is true, they may not have so large a monopoly as they desire, but they have all they contracted for, while another portion of the State is developed, and the people have the benefits of low freights resulting from the competition.

The State has taken stock in two railroad companies. I oppose this policy, and do not think she should be a partner with citizens in such an enterprise. My opinion is, that she should have no interest in any property over which she has not the entire control. By endorsing the bonds of the company, with ample security, she complicates herself with none of its private management or affairs.—*American Railroad Journal.*

PLAN FOR READJUSTMENT OF DEBT OF PITTSBURG, FORT WAYNE & CHICAGO RAILROAD COMPANY.

Statement of the indebtedness of the Company as it stood June 30th, 1859, (omitting the Real Estate Bonds, as they are secured independently upon land,) including interest maturing before July 1, 1861:

First Mortgage Bonds.

Of Ohio and Penna. R. R. Co.....	\$1,758,000
Of Ohio and Indiana R. R. Co.....	1,000,000
Of Ft. Wayne & Chicago R. R. Co.....	1,250,000
Sinking Fund Bonds issued for Coupons of above bonds.....	420,000

Total.....\$4,428,000

Interest on all of above bonds falling due before July 1, 1861, not exceeding.....\$680,000—\$5,108,000

Other Bonds.

Income Bonds of the Ohio & Pennsylvania R. R. Co.....	\$1,991,000
Second Mortgage Bonds of Ohio and Indiana R. R. Co.....	380,000
Third Mortgage Bonds Ohio and Indiana R. R. Co.....	17,000
Construction Bonds Pittsburg, Ft. Wayne and Chicago R. R. Co.....	

Amount issued.....	\$1,229,000
Balance hypothecated; and applicable to funding of Floating Debt and purchase of additional equipment.....	2,271,000

Total.....\$5,888,000

Sinking Fund Bonds issued for all Coupons except those of First Mort. Bonds.

Amount outstanding.....214,000

Total.....\$6,102,000

Interest on all of above bonds maturing before July 1st, 1861, not exceeding.....398,000

Bridge Bonds.

Amount issued.....216,500

Total amount of bonds issued, and required to be issued, to fund all indebtedness.....\$11,816,500

It is proposed to readjust the above debt as follows:

1. The first mortgages on the Ohio and Pennsylvania, the Ohio and Indiana, and the Fort Wayne and Chicago Railroads, to be assigned to ———, Trustee, and a new first mortgage upon the whole road to be executed to the said Trustee for \$5,100,000. The bonds issued under the mortgage to be irredeemable, and to bear six per cent per annum interest, payable semi-annually in New York.

The holders of the bonds secured by the several old first mortgages, and of the sinking fund bonds issued for interest on said old first mortgage bonds, to exchange them for those of the new *First General Mortgage*, and to convert their coupons falling due before July 1st, 1861, into the said new bonds.

The Trustee, in case of a default in payment of interest for ninety days, to take possession of and work the road, until satisfactory arrangements are made by the Company to meet the interest regularly thereafter.

2. The Second and Income Mortgages of the old roads, (including a Third Mortgage of \$17,000 on the Ohio and Indiana Railroad,) the General Mortgage on the consolidated road, and the mortgage made to secure the Sinking Fund Bonds issued for interest on all except the First Mortgage Bonds, to be assigned to ———, Trustee, and a new Second Mortgage to be executed to said Trustee, securing the issue of \$6,500,000 of *Seven per cent. Preferred Stock*, in 130,000 shares of \$50 each. This mortgage shall give such Preferred Stock precedence of all other debts except those for such labor and materials as may be necessary for operating the road.

Its issue to be limited to \$6,500,000.

The Bonds secured by the above Mortgages, viz: the Income Bonds of the Ohio and Penn-

sylvania Railroad Company, the Second and Third Mortgage Bonds of the Ohio and Indiana Railroad Company, the Construction Bonds of the Pittsburg, Fort Wayne and Chicago Railroad Company, and each of the Sinking Fund Bonds as have been issued for interest on other than First Mortgage Bonds, to be funded at par in this *Preferred Stock*, which shall be entitled to all the net profits of the Company, until the amount during any one year shall exceed a sum sufficient to pay the interest on the First Mortgage Bonds, and a dividend of seven per cent. on the said preferred Stock; the surplus, if any, to form a dividend on the Common Stock.

Until the necessary legislation can be obtained, transferable certificates of indebtedness to be issued, secured by this Second Mortgage, and to bear interest at the rate of six per cent. per annum, payable semi-annually. These certificates or bonds to be converted into the *Seven per cent. Preferred Stock*, as soon as such legislation is obtained. If the required legislation can not be obtained, then said certificates or bonds shall be converted into *Irredeemable Seven per cent. Bonds*, secured by a Second Mortgage.

If the Company should—within ninety days, after the interest becomes due on these bonds, or dividends, on the certificates of stock secured by this mortgage,—fail to meet said interest or dividend, the Trustee shall take possession of the road, and manage it temporarily, for the interest of all parties; and he shall, immediately thereupon, give notice to the preferred Stockholders to elect *twelve* members, and to the Board of Directors to elect *three* members, of a Board of Control; and said Board shall have all the powers in relation to the management of the road that before devolved upon the Board of Directors. The Board of control shall be elected annually, in the proportions above named, by the preferred and common Stockholders; and shall continue in power until the interest on the Preferred Stock shall be promptly met, and a surplus remain, amounting to two per cent. on the Common Stock—whereupon the Common Stockholders may resume control of the road, with the proportion of Directors above named, reversed.

3. The Floating Debt of the Company (as it stood Oct. 30, 1859,) was as follows:

Secured Floating Debt.....	\$1,168,963
Unsecured ".....	661,649
Total.....	\$1,830,612

This can be discharged by appropriating the net revenues of the road until January 1st, 1861, estimated at, say \$700,000, and so much as may be necessary to the Preferred Stock remaining after funding the bonded debt.

4. Any *surplus* of Preferred Stock, after the payment of the floating debt, to be held and disposed of for the purpose of increasing the equipment of the road, and of erecting stations at its termini.

5. The condition of the Company will then stand as follows:

Common Stock.....	\$6,263,438	33
Seven per cent. preferred stock.....	6,500,000	00
First Mortgage six per cent. bonds.....	5,100,000	00
Bridge Bonds.....	216,500	00

Total capital and debt.....\$18,079,938 33

Excepting Real Estate Bonds, which are separately secured on land.

6. The income required to meet the interest on the debt will be as follows:

6 per cent. on first mortgage bonds.....	\$5,100,000	—\$306,000
7 per cent. on preferred stock.....	6,500,000	—455,000
7 per cent. on bridge bonds.....	216,500	—15,155

Total interest.....\$776,155

An amount which the net receipts of the road will, it is believed, be ample to meet, on and after the first day of July, 1861.

EXPLANATORY STATEMENT.

The above plan for the re-adjustment of the debt of the Pittsburg, Fort Wayne and Chicago Railroad Company—which is at present secured by no less than ten distinct mortgages—has been arranged after consultation with the representatives of a large amount of its bonds. If accepted it will remove the embarrassments of the Company, and at once give vitality to its securities, without the cost, delays and uncertainty attending the litigation which the numerous classes of creditors, chiefly the result of the consolidation of three distinct companies—must inevitably produce.

The existing first mortgages are upon separate divisions of the road, and executed to different Trustees. The first issued is upon the road from Pittsburg to Massilon—covering a line both in Pennsylvania and Ohio. The second from Massilon to Crestline, in Ohio only. The third from Crestline to Fort Wayne, in Ohio and Indiana; and the fourth from Fort Wayne to Chicago, in Indiana and Illinois.

These mortgages differ materially in their conditions, and do not seem to fully meet the requirements of the laws of some of the States traversed, as now understood. It is proposed to cover these defects by giving to these bondholders a general mortgage over the *whole road*, that will place their hands without litigation, the most summary process for enforcing the payment of interest. It is also proposed to make these bonds irredeemable except by purchase in the open market. This feature, when the small amount of debt to remain upon the whole road is considered, will be found of great value. It will be similar in its effect on this security to that upon an irredeemable ground rent in Philadelphia, which commands a premium of about 20 per cent. over one that is redeemable, upon property of equal value.

The advantages of this arrangement seem to fully justify the second class of bondholders and the Company, in asking a concession upon the part of the first mortgage bondholders of one per cent. interest from the recommencement of cash payments. Its effect, if carried out, will, doubtless, be to advance the market value of their securities from 50 and 60 per cent., their present rate, to 80 per cent., and upwards as its advantages become fully understood and appreciated. The accruing interest (the Company having no other debt) will be as punctually met as upon the bonds of any Railroad Company in the country—the whole amount required for the purpose being but sixteen per cent. of the present receipts of the road.

The holders of the second class of bonds (including the construction bonds, *which, with the exception of two small mortgages amounting to \$397,000, constitute a second security on two hundred and eighty miles of road; while the Income Bonds of the Ohio and Pennsylvania Railroad—the remaining security of this class—amounting to \$1,991,000, are a second mortgage on one hundred and eighty-seven miles*) are asked to fund their coupons falling due previous to July 1, 1861, and to receive therefor a preferred seven per cent. stock. Included in this preferred stock will be about \$1,600,000 of construction bonds required to cancel the secured debt of the Company, incurred for the benefit of the whole road. The remainder will be necessary to increase the rolling stock, build depots and place the Company in a condition to earn a

dividend upon its preferred shares of seven per cent.

The second class of bondholders by this arrangement free the property of the Company at once from all risks of separation into fragments, or of its passing into other hands; and in case of default to meet the dividend of seven per cent. upon the preferred shares—from the net revenues of the road—they obtain absolute control of its management. These preferred shares—limited in amount as they will be by a specific mortgage—will be a much more desirable investment than the higher sounding securities which they replace.

The business of the Company is materially embarrassed by the present condition of its indebtedness. No party is willing to step forward and relieve its necessities, under the existing complication of its affairs. The interests of all of its creditors, therefore, demand an early adjustment of its liabilities upon some satisfactory basis.

The floating debt, secured and unsecured, has been incurred for the completion of the road after the failure of the Company; for its equipment with locomotives and cars, and for labor and materials for working the line, during a vain effort to preserve the credit of the Company by the payment of the interest upon its securities. The amount due for labor and materials constitutes nearly the whole of the unsecured floating debt, and is of that character which seems to demand the consideration of all interested. The application of the net proceeds of the road that can be spared, form the protection of its pledged bonds, (for the time stated in the plan,) will remove these obligations.

This plan of adjusting the Company's indebtedness is submitted, under the full conviction that its adoption will promote to the greatest extent, the interest of all the creditors of the Company, while it requires no concession from any interest for which there is not, in our opinion, an ample equivalent granted.

J. EDGAR THOMSON,

Pres't P., Ft. W. & Chi. R. R. Co.

PHILADELPHIA, Nov. 25.

PEORIA, ILL.—HER RAILROADS.

From *Hunt's Merchants' Magazine* we gather the following facts in relation to Peoria and her railroads:

Since the opening of the various railroads leading out of the city, the importance of the Illinois River as a channel of communication has somewhat diminished. Still the river business is very heavy. A daily line of steam packets ply between Peoria, St. Louis and La Salle; and the trim steamer Delta makes two trips a day between that city and Pekin, ten miles below. There are, besides these, several boats running between there and Pittsburg and other cities, and scarcely a day goes by without the arrival and departure of some laboring steamer, with a fleet of canal boats in tow. The amount of Peoria freight received and forwarded by the river last year by steamers was 60,000 tons. This was exclusive of the merchandise shipped by canal boats, of which there are no reliable statistics, although it was heavy. The distance by river between Peoria and St. Louis is two hundred and forty miles.

There are at present three railroads leading from the city, with two additional roads in process of construction.

The Peoria and Bureau Valley Railroad runs from Peoria to Bureau Junction, where

it connects with the Chicago and Rock Island Road. It is forty-seven miles in length. The company was organized in June, 1853, and the road was completed in November, 1854. It is operated by the Chicago and Rock Island Company, who pay an annual rent of \$125,000. The distance between Peoria and Chicago by this and the Rock Island Road is 160 miles; between Peoria and Davenport, Iowa, 115 miles.

The Peoria, Oquawka and Burlington Railroad extends from Peoria to Burlington, Iowa, a distance of 95 miles. The Company was organized in June, 1851, and the road completed in January, 1857. The road is operated by Moss, Harding & Co., lessees. The amount of freight received and shipped at the Peoria station of this road last year was 28,000 tons.

The Peoria and Oquawka (Eastern Extension) Railroad is now completed to Gilman, on the Chicago Branch of the Illinois Central Railroad, 86 miles, and is in process of construction to Logansport, Indiana, 87 miles further, where it will connect with the Toledo, Wabash and Western Railroad direct to Toledo, and thence east by the Lake Shore and other routes; also at Logansport with the Cincinnati and Chicago Road to Cincinnati, and Central Ohio, etc.; and at Fort Wayne with the Pittsburg and Fort Wayne Road to Pittsburg, Philadelphia, Baltimore, Washington, and New York. A connection will also be made at Middleport, Iroquois County, Illinois, with the Lafayette and Indianapolis Road, (to be extended from Lafayette to Middleport,) whereby the distance to Indianapolis, Louisville, and Cincinnati will be still further shortened.

The Illinois River Railroad, which is in process of construction, is to extend from Peoria to Jacksonville 86 miles, where it will connect with the Jacksonville, Alton and St. Louis Railroad, thus forming, with the Bureau Valley and the Chicago and Rock Island Roads, another continuous line from Chicago to St. Louis.

Peoria is immediately surrounded by immense and inexhaustible mines of bituminous coal. It crops out of the bluffs on nearly every hand, and is mined and brought to the city and exposed for sale in wagons, the same as wood and hay. An idea of its extreme cheapness may be gained when we say that the average price of this coal, delivered at people's doors, is about eight cents per bushel, or \$2 per ton. Let one consider the cost of mining, the expense of a team of two horses and wagon, with man, to bring it into the city, taking a half day and some times more, before a sale is effected, and we think that he will agree with us that there is not a very large margin for profits, and that it can not well be afforded cheaper. Large consumers, however, such as distillers and manufacturers, pay 7½ cents per bushel, delivered. A heavy business has sprung up within a couple of years, or since the opening of railroads east and west, in the way of exportation of coal.

GULF AND SHIP ISLAND RAILROAD.—We learn from the *Mississippian* that the Board of Directors of the Gulf and Ship Island Railroad Company have fixed the terminus of the road on the Gulf shore, at Mississippi City, and have adopted the line surveyed by Engineer Green, which was surveyed under instructions to approximate the air line between Canton and Brandon as near as practicable, with reference to the required grade and cost, etc. This line is only ten miles longer than the air

line, and the estimated cost, everything included, amounts to \$3,433,100. It will be remembered that the cost of the route surveyed by Engineer Robinson was estimated at three millions. The route adopted, instead of stopping at Jackson, extends to Canton, increasing the distance seventeen miles, by measurement.

The present line intersects the Southern road five miles west of Brandon, proceeding South, passes through Simpson County fourteen miles east of Westville, and through Covington County, three miles east of Williamsburg, passing through the north-west corner of Perry County, and thence through the eastern part of Marion County, enters and passes through the north-west corner of Perry County, and enters Harrison and terminates at Mississippi City.—*Vicksburg Whig*.

REPORT OF THE INSPECTOR OF RAILWAYS IN CANADA.

The Board of Railway Commissioners of Canada, have published in the form of a Blue Book, the Report of Mr. Samuel Keefer, Inspector of Railways, dated Toronto, Feb. 28, 1859, for 1858, a copy of which we have received. This is the first report that has been made by Mr. Keefer since the passage of the Accidents on Railways Act in 1857. The act, he says, was passed too late to enable him to complete a report that year.

At the time of the passage of the act, in 1857, there were 1,402 miles of Railroad in operation in Canada. In 1857, after the passing of the act, 70 additional miles of Railway were opened in Canada. In 1858, 140 miles were opened. Altogether, at the close of 1858, there were 1,612 miles open in Canada, besides the branches in the United States connecting with them, and controlled from this side the lines, as the Grand Trunk to Portland.

Mr. Keefer says it is worthy of remark that Canada has now more miles of railway open than Scotland or Ireland, or any of the six New England States; more than the three Atlantic States of New Jersey, Delaware, and Maryland, or the two Carolinas, North and South, and is only exceeded in the number of miles open by the five following States:

New York, which has.....	2,726 miles.
Pennsylvania, ".....	2,678 "
Ohio, ".....	2,978 "
Indiana, ".....	1,939 "
Illinois, ".....	2,774 "

1,465 miles of the Railways in Canada have the Provincial medium gauge of 4 feet 6 inches; and 147 miles have the narrow gauge of 4 feet 8½ inches.

Mr. Keefer says:

There are now in course of construction no less than seven lines or sections of Railway, of which, in all probability, about 327 miles will be completed and opened for Traffic in the course of this year. They are:

1. The Grand Trunk—St. Mary's to Sarnia..	70 miles.
2. The Grand Trunk—St. Thomas to R. R. Du Loup.....	78 "
3. The Grand Trunk Junction at Victoria Bridge.....	6 "
4. Brockville and Ottawa—to Perth and Land Point.....	154 miles.
5. St. Austead, Shaftford, and Chambly—St. John's to Stuckley.....	86 "
6. The Welland.....	45 "
7. The Hamilton and Port Dover—Hamilton to Caledonia.....	23 "
8. The Hamilton and Port Dover—Hamilton to Caledonia.....	17 "
In all.....	327 "

Several of the above sections have been already finished.

We further gather from the report that: The average speed of express trains, includ-

ing stops, is 26 miles per hour; and in motion between stations, 30.5 miles per hour. The maximum speed is got upon the Montreal and Quebec division of the Grand Trunk Railroad, which is 36 miles an hour. The average speed of accommodation trains is 22 miles per hour, including stops, or 27 miles when in motion between stations. The average speed of mixed trains is 15 miles, including stops, and 19 miles when in motion. The average rate of freight trains is 13 miles, including stops, and 19 miles when in motion. The total number of locomotive engines upon all the roads, at the end of 1858, was 366.

Of the locomotives, the Portland Company have furnished 52; the Amoskeag Works 48; the Schenectady Works 32; the Boston Works 23; Lowell and Manchester each 12; Philadelphia 10, and other United States works 20; Messrs. Peto & Co. 50; Fairbairn 12; Stotbert & Slaughter (Eng.) 20, and other English builders 28. Canada has built 47. Of the whole number, the shops of the United States have furnished 209, England 110, and Canada 47.—*Montreal Transcript*.

NEW RAILROAD PROJECT.

From the Dubuque papers we learn the particulars of another Railroad scheme, recently concocted at Lyons, whence have originated so many brilliant railroad projects.

The Directors of the Iowa Central Air Line, held a meeting on the 15th ult., at Lyons, and after continuing in session for five days, the following programme was adopted: The Air Line Company "relinquished" to the "Dubuque, Marion and Western Railroad Company all its right, title and interest in the land granted to the State, for the construction of the Iowa Central Road; and also right of way secured along the line." The Dubuque, Marion and Western Company, of which Ed. Stimson, of Dubuque, is President, Herman Gelpcke, of New York, Ed. Stimson, F. S. Winslow, and John Bell, of Dubuque, and Hon. Robert Smyth, and W. S. Neely, of Marion, are Directors, "agree to construct a railroad from Anamosa to Marion on the line of the Iowa Central, and thence west to the Missouri river. That part of the road from Anamosa to Marion is to be completed by the 1st of July, 1860,"—provided the citizens of Marion and those along the line between there and Anamosa, raise \$50,000 toward the expenses.

This, as we understand it, is substantially the project; and as it is one in which the citizens of this county and of the central part of the State are much interested, we propose to examine it a little farther.

The extension of the Dubuque and Anamosa road into this county, and its connection here with a road running westward, we have always regarded as very desirable. It would give Dubuque not only a connection with the entire central tier of counties west of this, but eventually with the capital of the State, via Maren-go, which place will at no distant day be connected by rail with Cedar Rapids. The entire country traversed by the road; would be furnished with a desirable north eastern outlet, and this new thoroughfare for trade and travel, would soon become a very important one.

This new project, if fully carried out, would doubtless accomplish these desirable ends, and harmonize and satisfy the conflicting interests in this county, as both Marion and Cedar Rapids would probably be points on the line. The only question then is, is this scheme a sound and practical one? Can it be carried out? A few facts will satisfactorily answer the question.

The plan was originated for the purpose of embarrassing, and, if possible, preventing the transfer of the land grant to the Cedar Rapids and Missouri River Railroad Company. The Air Line Company, conscious that the land grant must soon pass from its hands, was of course glad to relinquish its right and title, to any parties willing to promise a consideration. The Dubuque Western Company, compelled by necessity to seek aid and strength somewhere, and glad to organize a new Company to extend its road, and receive a land grant for that purpose, was of course ready to promise the demanded consideration. As leading parties in the scheme, we recognize some who have become very heavily involved in the Dubuque Western, and we presume they are sharp enough to look for their money where they lost it.

It is other considerations than these, however, which render the plan impracticable. It is utter nonsense for a company to load itself down with debt, particularly in these times and in this country, and then talk about beginning to build a railroad. It is now easy task for a company which sets out with the cleanest record and the fairest prospects. From the Dubuque papers we learn that the "relinquishments and transfers of the Air Line Company, received the full, free assent of all the officers, contractors, and *bona fide* creditors of that company." Again, they also tell us that "this relinquishment is made upon conditions which are not only satisfactory to all parties concerned, but which particularly secure the rights of the east end of the line from Anamosa to Lyons." To us, this plan seems altogether too "satisfactory." Last June, according to the public statement of its most reliable officer, the indebtedness of the Air Line Company exceeded \$600,000. If the present scheme is so peculiarly satisfactory to all the creditors of that concern, it is clearly evident that in some shape, this immense indebtedness has been assumed by the new Company. It was this same fatal blunder which the Air Line Company committed at the outset, and which has now consigned it to an ignominious grave. A little light is shed on this point by the following statement of the Dubuque *Herald*—the italics are ours:

"The Iowa Central Company is hopelessly insolvent—their road encumbered with a load of debt and an amount of bogus bonds from which the Company could never hope to escape. By the transfer they have secured not only the construction of a railroad upon this line from Anamosa west, and an amount of land which will in a few years wipe out the debts of the company, but also upon certain conditions which the Air Line Company has the power to see complied with—that part of the road from Anamosa to Lyons, now largely graded, will be entirely free from encumbrances, and ready, with but a small amount of work to receive the superstructure."

The citizens of the counties in which the lands lie, the idea of using the lands to pay the indebtedness of the old Air Line Company, will be about as gratifying as the plan of commencing to build the road at Anamosa—twenty or thirty miles farther east than is necessary to get a direct Eastern connection.

But aside from the immense debt which the new company has saddled upon itself to start under, the transfer of the land grant does not seem to have been made in the most satisfactory and legal manner. One of the conditions upon which the State granted the land to the Iowa Central Company was, that it should complete seventy-five miles of their road by

December 1st, 1859. This is the day; but not a foot of their line is completed. The act granting the land further provides, that in case the company fails to comply with the conditions imposed, then the lands revert to the State, and the Company forfeits all right, title and interest in the grant. All that is meant, then, by the "relinquishment" and "transfer" spoken of, is that the new Company receives a "quit claim deed" from the Iowa Central Company. The claim it gives to the land, is worth, probably, about the cost of the paper it is written upon. The Iowa Central Company never owned the land, having never perfected their title; and now, by failure to comply with the conditions, have forfeited all claim which it ever did possess. The old Company "relinquished" to the new, that which it has not got, never did have, and never will. The whole proceeding reminds us of the offer of all the kingdoms of the earth, which Satan made on a certain occasion.

Notwithstanding therefore, the desirableness of the ends sought to be obtained, we are forced to conclude that the present scheme is unsound, impracticable, and without anything to recommend it to any one, unless it be to the creditors of the Air Line and the Dubuque Western.—*Cedar Valley Times*.

ANNUAL REPORT OF THE WILMINGTON AND WELDEN R. R. CO. OF NORTH CAROLINA.

Gentlemen: The President and Directors, in laying before you their Twenty-Fourth Annual Report, feel gratified in believing a comparison of the transactions of the Company for the past two years with its previous history, will give you the most hopeful assurance for the future.

The Report of the Treasurer shows an aggregate of receipts of \$477,554 75; some \$30,000 in excess of the previous year. The cost of operating the road (which also includes the perfecting of what was unfinished and the repairing of what was in a state of decay,) amounts to \$242,353 75, for a statement of which, in detail, you are referred to the report of the Engineer and Superintendent. The difference between the receipts and the expenses, as exhibited, shows that we have made nearly eighteen per cent on our capital stock. These profits have been absorbed in the regular contribution of four per cent to our sinking fund—five per cent to the payment of the interest on our debt, including premium on exchange, and eight per cent in dividends to our stockholders, leaving a small balance on hand. Our profits, indeed, are not as large as they were for the year ending October 1st, 1857; but when it is recollected that at that time we had the benefit of an exclusive through ticket between the Northern and Southern States, (the only rail connection between these points being over our line,) and that then the outside steamers from Charleston, Savannah, and New York were not running in opposition to us, we are only astonished that the difference is not much greater. During the last twelve months, four new lines of rail connections, (each earnestly and energetically competing with us) have been established. The outside steamers, formerly, only a few screw propellers, have increased from seven to sixteen, and are now of the largest class of side wheel steamers. The immense amount of freight which they carry enable them to transport passengers at a greatly reduced price. Under these circumstances we repeat, that the amount of our through travel for the last year should give to the stockholders most

reliable assurance of future prosperity. But while the elements of opposition to the great Atlantic Trunk Line have been thus fully developed, the managers of this line have not been remiss. New connections with it—both North and South of us—are in rapid progress of construction, which will not only insure greater despatch of travel, but must diminish expense. Before the end of another year, the Wilmington and Seaford Road will be extended to a point on the Chesapeake Bay, about 80 miles north of Portsmouth, and passengers can then be carried from this point to New York in eight hours less time than is now required for the same service. Early in January, the road across the Peninsula of Florida, from Fernandina to Cedar Keys, will be completed. This work, in connection with a daily line of steamers from Charleston to Fernandina, (already established,) will put it in close connection with the vast travel of the Gulf of Mexico.

But, notwithstanding this promising aspect of our through travel, it is our domestic business—both in travel and freights—which should inspire us with the most confidence. While the former—way travel—is in excess of any previous year, our freights, in defiance of all competition, manifest a steady increase. The report of the Engineer and Superintendent demonstrates the great disadvantage under which this branch of our business (which, of all others, should be most cherished) labors. His remarks on the policy of our assisting it, by the employment of a line of steam packets between Wilmington and New York, are earnestly recommended to your consideration. And our ability, in connection with the Manchester and the Rutherford Railroad Companies, to support such a line, can not be doubted.

The stockholders will perceive from the report of the Chief Engineer, that the resolution authorizing the construction of a branch road from Rocky Mount to Tarboro', adopted at a special meeting of the stockholders, held in Wilmington on the 19th of May last, has been partially executed. The contractors, who have given bond with approved security for the faithful performance and completion of their contract before October, 1860, are now at work. A change of both of the termini, as fixed by the survey, and as embodied in the contract, is earnestly solicited by some of the stockholders. This subject is referred to you for your consideration.

Respectfully submitted,

WM. S. ASHE, President.

November 10th, 1859.

SOUTHERN PACIFIC RAILROAD.—As we predicted in our issue of last Saturday, the \$150,000 asked by Dr. Fowlkes, to secure the acceptance of the presidency of the Southern Pacific Railroad by J. Edgar Thompson, has been raised. The whole sum was subscribed by our own citizens in double-quick time. Before the convention adjourned last Friday, \$50,000 of the sum was taken in a few moments, and now there is nothing more to take.

This is good news for the friends of the greatest railroad enterprise of the age. It will send a thrill of joy through many a heart in the different States of the Union. The subscribing of this \$150,000 in the stock of the Company was all that was to be done to secure Thompson as President. He had, in his all-abundant caution, required all litigation against the Company to be ended, all of the debts of the corporation to be paid, and \$250,000 available means to be in its treasury for construction purposes, before he would accept the presiden-

cy of the road. All has now been done that he required. Litigation is ended, the debts of the Company have been paid, and the \$250,000 placed in the treasury of the Company, subject to the control of the new President. Texas subscribed \$100,000 of the sum, and Kentucky the remaining \$150,000.

The Southern Pacific Railroad is, therefore, safe and sound. The troubles of the corporation may be considered over, and its joys will now come thick and fast. Dr. Fowlkes leaves here for Nashville this morning, and will go from there to Philadelphia in a few days to install President Thompson into office. No better news could be announced to the stockholders of this company, and it gives us as much joy to impart it, as it will give them to receive it.

While the stockholders are rejoicing at this good news, let them not forget to whom they are indebted for the result. They owe it to none but Dr. Fowlkes. He has wrought out this result at the risk of health and fortune and life. He has gone right on to success in spite of the mountainous opposition that was in his way and that would have caused almost any other mortal to have shrunk from the undertaking. Whatever his enemies may say against him, his conduct in the affairs of the Southern Pacific Railroad is a bright spot upon his character, and would be an honor worth a life of toil to any man. He has identified his name with an enterprise that will live when generations yet unborn shall be swept from the earth, and no matter what president shall construct the road, now that it is out of trouble, Dr. Fowlkes will be entitled to the glory of wresting it from ruin and preparing the way for his successor to complete it.—*Louisville Journal.*

MONETARY AND COMMERCIAL.

The offerings since our last weekly review have been uniformly in advance of the supply, varying slightly, however, from day to day, in accordance as the weather affected the hog trade. The present outflow of money for pork will in a few days begin to return in remittances to our merchants in payment for goods, and after the middle of January we may expect an easier time for borrowers. Rates remain without change to selected customers, at 11@12, while those who have not got "friends in court," with equally good paper, have to go outside and pay much higher figures, say from 15@24, and many think themselves well off to get it even at that.

Eastern Exchange is firm at $\frac{1}{2}$ buying and $\frac{1}{2}$ selling.

The speculative movement in the hog trade has been pretty active during the past weeks, and on Monday probably reached its highest point for the season, viz, \$7. The ruling rate on Wednesday was \$6 54. The Price Current gives the following as the receipts—

For the week.....	53,805
Previously reported.....	89,264
Total this season.....	143,069
Same time in 1858.....	231,142
" " 1857.....	137,810
" " 1856.....	183,373
" " 1855.....	203,582
" " 1854.....	134,738

From the above it will be seen that there is a great falling off as compared with last year. Last year, however, the hogs were hurried to market, because the farmers had no corn to further fatten them, and hence the early receipts were unusually large. This year, the same cause, (that is the shortness of last year's corn crop) tends to retard the early receipts of hogs as they were not in good condition when the present corn crop matured; hence, the late receipts will probably be in excess of last year, but in the aggregate will probably fall short of last year. More young hogs will be kept over this year than last, although with the present price of corn there is more money in the corn than the hog.

The following table show the gross amount derived by the Railroads of Virginia from tolls, freight, fare and other sources:

Companies.	Total.	Monthly earnings.	Total amt rec'd fiscal year '58-9.
Virginia Cent. R. R.....	\$1,034,330	16	54,442 16
Virginia & Tenn. R. R.....	885,901	42	58,389 43
Richmond & Danville.....	843,420	58	47,166 82
South Side R. R.....	435,143	33	33,472 56
Rich'd. Fre. & Potomac.....	452,374	70	23,509 19
Rich'd. & Petersburg.....	253,041	68	13,317 78
Winchester & Potomac.....	92,727	64	5,141 49
Roanoke Valley R. R.....	17,453	37	1,589 38
James R. & Knawha.....	180,359	40	20,039 95
Elk River Bridge.....	2,465	58	145 02
			1,837 88

The following shows the earnings of several Eastern and Western Railroads during November, as compared with the corresponding month of 1858:

Roads.	Nov., 1858.	Nov., 1859.	Increase.	Per cent.
Galena.....	\$102,83	\$123,203	\$19,40	18 $\frac{1}{2}$
Rock Island.....	68,350	93,328	30,978	45 $\frac{1}{2}$
Toledo.....	75,600	77,000	1,400	2
Erie.....	513,000	623,000	110,000	21 $\frac{1}{2}$
Hudson River.....	137,091	157,443	20,348	15
New Haven.....	70,197	79,187	8,989	12 $\frac{1}{2}$
Illinois Central.....	156,028	250,743	94,804	60

Earnings in October of the Pittsburg, Fort Wayne and Chicago, and Michigan Southern Roads:

	Inc.	Dec.	Inc.
Freight.....	\$27,301	.....	\$34,560
Passengers.....	272	\$22,264	.....
Miscellaneous.....	4,247	.....	3,957
	\$31,920		\$16,253

Gain of Pittsburg, Fort Wayne and Chicago over Michigan Southern Road.....\$15,667

The New York *Enquirer* says:—The dullness noticed on Saturday was very apparent at the first session of the Stock Board to-day, and with few transactions, prices were flat and heavy. The recent speculation seems to have died out, and the Bears have resumed the control of the market.

State Stocks were dull and heavy, with sales of Virginia at 92 $\frac{1}{2}$, Missouri 83 $\frac{1}{2}$, and Ohio 102. There was but one Railroad Bond sold—Hudson River Third Mortgage, 78 $\frac{1}{2}$. Bank of New York 193 $\frac{1}{2}$, Commerce 99 $\frac{1}{2}$. Pacific Mail opened at 75, and with some activity advanced to 76, being the most buoyant stock on the list.

The Banking movement for the past week will create some surprise, the changes, compared with the previous week, being as follows:

In Loans, an increase of.....	\$713,000
In Specie, an increase of.....	1,214,000
In Circulation, an increase of.....	127,000
In Deposits, an increase of.....	2,686,000

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned
THEODORE DEHON,
no13 19 Wal ar Broadway, New York

NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith
Branch of the Cairo and Fulton Railroad Co., Van Buren, Ark., Sep. 10, '59.

SEALED PROPOSALS for the graduation of the First Division of twenty miles eastward from Van Buren, will be received at this office until **Thursday noon, December 1st, 1859.** The work is divided into twenty sections of about one mile each, and proposals for either a part, or the whole of this Division may be made; but no bids for less than one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise. Estimates of work done will be made on the first day of every alternate month, and payments made on the first day of the month following; and fifteen per cent. of all estimates will be retained until the completion of the contract. Contractors desiring other terms of payment may bid accordingly, as the above terms are not positively settled.

The Company having a large amount of the finest Lands in Western Arkansas, will give preference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications may be seen, and all desired information obtained, upon application at the Engineer's Office, in Van Buren.

JESSE TURNER, President.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
No. 67 est 6th St, bet. Walnut & Vine.
CINCINNATI O

Direct Route to the North-West!

—VIA—

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AND PANOR SANDOVAL

FOR

Decatur, Springfield,
Bloomington, Peoria,
Burlington, Quincy,
La Salle, Rock Island,
Dixon, Galena,
Prairie du Chien, St. Paul, and
St. Anthony, And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANA for all the above points. Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via

PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,
Gen'l Southern Agent, Cincinnati.

W. F. JOHNSON,
Gen'l Passenger Agent, Chicago.

Winter Arrangement, 1859-'60.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads. Steamers, etc., for and from all points in the

West, South-West and North-West.

TWO TRAINS

Leave Wheeling daily at 12:35 P. M., and 10:10 P. M.

One Train leaves Parkersburg daily at 9:20 P. M.

Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City. Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2.

Time as quick and Fare as low as by any other ROUTE.

Inquire for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

E. F. FULLER,
General Western Agent.

L. M. COLE,
General Ticket Agent.

W. P. SMITH, Master Transportation.

Gas Works also be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and work days only, or continuously, as required; easily and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circular which can be had on application.

1st. From the great simplicity of construction peculiar to the RUBIN WORKS, the retort is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet.....	\$300 00
do do 350 "	335 00
do do 400 "	375 00
do do 500 "	450 00
do do 600 "	525 00
do do 700 "	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorate rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, as now in operation in several States, apply to

R. T. COVERDALE,
167 Walnut Street, Cincinnati, Ohio,
who has the exclusive right to manufacture and sell in the
State of Ohio.

Feb. 24th, 1859.

Booksellers, Publishers, Stationers & Blank
Book Manufacturers,
43 Main St. Cincinnati, O.

APPLEGATE & CO., Booksellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Booksellers, Country merchants, Teachers, and others to our extensive stock of varied and of Theological, School, Classical, Scientific, Standard, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the principal publishers, we are enabled to offer at prices solicited by a comparison of stock and prices with any other house in the West.

Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, Envelope, Manilla and Tea wrap-boards, Envelopes, Gold & steel Pens, Penholders, Copying Presses, and Books, Ink and Inkstands; Erasers, Sealing Wax, Wafers, Slates, Mucilage, Banker's cases, Book rests, Bill head boxes, Envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files; Date Calendars, together with all other articles used in the counting-house.

To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly paged, including all sizes, from the small memo-
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Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, Clarke's Com- mental- lin's Ancient History, Plutarch's Lives, Josephus, Spectator, Chain of Sacred Wonders, Familiar Science, Webb's Monitor, Soden's German, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, Books of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We in vite all to give us a call.

43 MAIN STREET, CIN.

Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

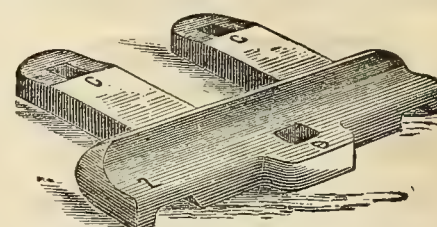
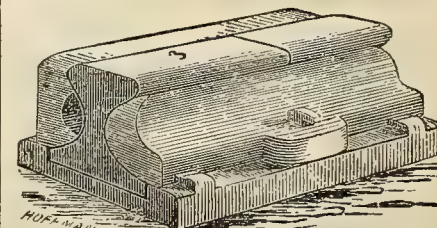


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess on the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through *them*, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the head of the rail, and the rails and the heads of the chairs are secured to the joint tie by spikes. These spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues an slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that on one part assists and takes the strain of the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly safe road, thereby doing away with the breaking of rails, wheels and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear of the rolling stock of the road.

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41 Jefferson-street, Albany, N. Y.
Sole Agent, Cincinnati O.

PROSSER'S PATENT
ORIGINAL LAP-WELDED
IRON AND STEEL BOILER TUBES,
SAFE FROM END TO END.

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ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

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The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being ALIKE on both sides, impossible to ravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

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Send or call for a circular, containing all particulars, prices, testimonials, etc.
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TRABER & AUBERY,
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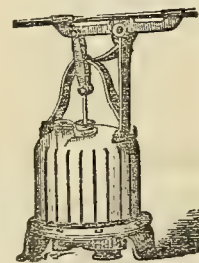
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AND
Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect attachment guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded for the best Compound Steam Pumping Engine at the 1st Fair Ohio Mechanics' Institute, June 18, 1855—1

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co., Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase
Ag 4, m. 6.

FREEDOM IRON COMPANY,

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods,

Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't.

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works
June 9.

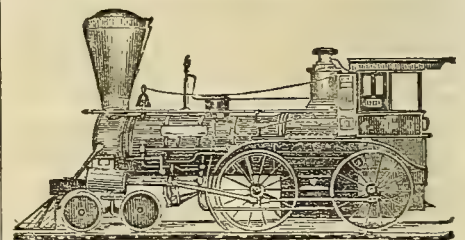
New Time Table

OF THE

NEW YORK CENTRAL R. R.

	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp.	7 00 A. M.	7 00 P. M.	7 00 P. M.
Mail	9 00 A. M.	12 50 A. M.	
New York Exp.	11 15 A. M.	9 00 P. M.	9 00 P. M.
Night Exp.	5 00 P. M.	4 00 A. M.	4 00 A. M.
Utica Accom.	6 00 P. M.	Ar. U. 10 00 P. M.	
N. Y. Mail	11 15 P. M.	10 00 A. M.	10 00 A. M.
	Leave Buffalo.	Leave Bridge.	Ar. Albany.
New York Exp.	5 15 A. M.	5 15 A. M.	3 30 P. M.
Steamboat Exp.	8 00 A. M.	8 00 A. M.	8 00 P. M.
Mail			2 30 P. M.
Cleveland Exp.	6 00 P. M.	6 00 P. M.	4 40 A. M.
Cincinnati Exp.	11 00 P. M.	11 00 P. M.	8 30 A. M.
Utica Accom.			10 00 A. M.

CINCINNATI
LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotives equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.
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MOORE & RICHARDSON.

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MILITARY INSTITUTE

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Address the Superintendent, at "Military Institute, Franklin Springs, Ky.," or the undersigned.

P. DUDLEY,
President of the Board;
Jan 5th.

The Railroad Record.

E. D. MANSFIELD, { Editors.
T. WRIGHTSON.

CINCINNATI:

Thursday Morning, Dec. 15, 1859.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

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Subscriptions and communications addressed to

WRIGHTSON & CO.,

Publishers and Proprietors.

IF The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

WABASH AND TOLEDO RAILROAD.

TRADE OF THE WABASH VALLEY.

The Toledo and Wabash Railroad Company have one of the most interesting routes, in regard to commerce and importance, to be found in this country. The Wabash river, rising on the western borders of the Ohio, and interlocking with the streams which make the Maumee, makes an easy and productive route for a railroad, through the Northern and Western portions of Indiana. Through the whole of this Valley, the country is very rich, and fast settling with a thriving population. Naturally, therefore, it is a good site for a railroad. The Toledo and Wabash Company have taken advantage of it, so far as their line lies in Indiana. The ultimate object of the Company seems to have been to connect with the Mississippi river on a direct and productive line, from that river to Lake Erie. This is done, through Danville, Springfield, Naples, (Illinois) by the line of the "Great Western Railroad," of Illinois. The entire line makes four hundred and eighteen miles, of which about one hundred and sixty-seven miles are in Indiana, and seventy-six in Ohio. From Toledo to Danville—two hundred and

fifty miles—is the route of the Toledo and Wabash Railroad. From Toledo this road pursues the Valley of the Maumee (through Napoleon and Defiance) to Fort Wayne. Thence it pursues the Valley of the Wabash (through Huntington, Peru, Logansport, and La Fayette) to Danville, Ill. Leaving Toledo, where five railroads and two great canals center, it connects, in its progress, with nine other railroads, most of which must directly feed its business. Notwithstanding these obvious advantages, it has commenced operations, under some unfavorable circumstances. It is less than two years since it was completed, and it had to struggle through all the adverse financial difficulties of 1857. This was certainly a drawback; but, it seems now to be progressing towards a very large and profitable business. We have before us, the detailed operations of the road, for the year ending 31st of August, 1859, as well as the report for the year before. The comparison of receipts and expenses stand thus:

	1857-'8.	1858-'9.
Gross receipts.....	\$676,022	\$702,508
Operating expenses.....	416,251	407,211
Net profits.....	259,769	355,297

There was also \$169,913 paid in 1858-'59 for "Construction expenses;" but this is not, properly, chargeable to the expenses of running the road. It is so much added capital. The actual net profits of the road have been increased, in the year past, nearly \$100,000, and the gross receipts about the same. The real expenses are about fifty-five per cent., and that proportion will probably not be materially diminished. The passenger traffic for the last two years compares thus:

	1857-'8.	1858-'9.
Through Passengers.....	10,916	37,930
Way Passengers.....	138,336	141,722
Receipts from Passengers.....		\$239,651
Total Passengers.....	149,252	178,652

The number of passengers, (especially through passengers,) has increased very decidedly, and we should think this road would finally be among the first in the country for passenger traffic. It lies through the heart of Indiana and Illinois, connecting with many local roads, intersecting those States; and leading to important towns.

In regard to freight traffic, we have the following results:

Flour, bbls.....	90,805
Wheat, bushels.....	344,589
Corn.....	352,152
Whisky, bbls.....	9,690
Cattle, head.....	26,848
Hogs, do.....	75,430
Coal, bushels.....	51,800
Pork, barrels.....	22,038
Beef, do.....	11,735
Lard, lbs.....	2,536,962
Tallow, lbs.....	273,132
Dressed Hogs, lbs.....	844,929
Hams, Salted, lbs.....	471,825
Hides, lbs.....	1,875,812
Lumber, feet.....	11,425,938
Potatoes, bushels.....	12,978
Salt, bbls.....	21,547
Cotton, bales.....	7,050
Merchandise, tons.....	21,547

There are some railroads which carry much more produce than this; but, certainly, this is a good beginning, and when we consider the great amount carried on the Wabash Canal, and the Northern Indiana Road, and directed

to Cincinnati, by way of Indianapolis, we shall begin to form an idea of the immense amounts of produce carried off, from Indiana and Illinois.

The Toledo and Wabash Road has cost a large capital, but not so much as some other roads. The cost, per mile, was \$36,000. The Cincinnati, Hamilton and Dayton; the Southern Michigan; the Pittsburg and Fort Wayne, have all cost more.

The elements of the Toledo and Wabash Road are as follows, viz:

Length.....	250 miles.
Capital Stock.....	\$2,965,100
Debt.....	6,150,000

Total cost.....	\$9,015,000
Locomotives.....	35
Passenger Cars.....	18
Freight Cars.....	580

The debt is distributed as follows:

First Mortgage.....	\$3,400,000
Second Mortgage.....	2,500,000
Floating Debt.....	150,000

If this road has made \$350,000 net profit in 1858-'9, there can be no doubt it will, with care, economy and good management, make \$600,000 per annum within five years, which will be more than six per cent. on its entire cost. It is not easy to make a rival to it; and for several years to come, there certainly will be none. As it is the destiny of the great mass of surplus products, in Northern Indiana and Northern Illinois to go East, it is certain, that a large part of them must go over this road.

The prospects of the Toledo and Wabash for future business, seems to us, therefore, very promising.

PITTSBURG, FT. WAYNE & CHICAGO RAILROAD COMPANY.

We stated the fact last week that the United States Court for the Northern District of Ohio had appointed J. K. Edgerton, Esq., of Fort Wayne, Receiver of the Pittsburgh, Ft. Wayne and Chicago Road. The domestic creditors at Pittsburg, hearing of this appointment, immediately made application to Judge Hampton, of the District Court, for the appointment of a Sequestrator, to receive and disburse the proceeds of the road in their behalf. The *Pittsburg Post* says:

The application was made on the part of Messrs. Park, McCurdy & Co., who had obtained a judgment against the corporation for the sum of \$1,800, the execution upon which had been returned unsatisfied, backed by other creditors of the road. Judge Hampton granted the application, appointing T. Haskins Du Puy, Acting President of the Road, a sequestrator, and requiring him to give bonds in the sum of \$300,000 for the faithful performance of the duties imposed upon him.

In the afternoon John H. Hampton, Esq., Solicitor for the Company, appeared in Court and offered J. Edgar Thomson and Geo. W. Cass, Esqs., as security upon the bond. The Court thought the bail sufficient, and ordered the writ appointing Mr. Du Puy to be issued, but said the gentlemen would be obliged to come into Court this morning and prove their competency.

Here are two conflicting interests to be reconciled, possibly involving the question of the jurisdiction of the respective Courts. This will not occur unless the Receiver undertakes to obtain possession of the road, when his efforts would be resisted with all the authority of our Court.

We understand that the offices of the Company here, not being advised of the disposition of the earnings of the road by the decree of the Ohio Court, did not feel warranted in opposing the domestic creditors as they might thereby do great injustice.

With the road in the hands of different receivers, it is evident that the public creditors and shareholders must greatly suffer, and it is to be hoped that it will not long remain so. It seems to us that the New York representatives of the bondholders have pursued a very ill-advised course, and are the really responsible parties for the present unfortunate imbroglio.

Mr. Du Puy, the Sequestrator, is now in undisputed custody of the road, and is operating the same. A friend at Pittsburgh has forwarded the following general order from the new officer:

PITTS., FT. WAYNE & CHIC. R. R. Co. }
Pittsburg, Dec. 8th, 1859. }

GENERAL ORDER NO. I.

To ———

DEAR SIR:—You are hereby notified that the courts have this day sequestered the property and revenue of this Company, and that you are required to hold yourself under my sole control, direction and advice in all matters pertaining to the interests and business of the Pittsburg, Fort Wayne and Chicago Railroad, and this you will do until further notice or change from me

T. HASKIN DU PUY.

PITTSBURG, FT. WAYNE AND CHICAGO R. R.

PITTSBURG, Saturday, Dec. 10.

This morning the District Court granted a rule upon Joseph K. Edgerton, Receiver for the Pittsburg, Fort Wayne and Chicago Railroad, appointed by the Circuit Court the Northern District of Ohio, to show cause why an attachment should not issue against him for obstructing T. Haskin Du Puy in the discharge of his duties as Sequestrator. A hearing was had this afternoon. Edgerton applied for time to answer and appear by counsel. The Court fixed Saturday next for argument, upon a promise made by Mr. Edgerton, in open Court, that he would not interfere with Du Puy in the discharge of his duties as Sequestrator in Pennsylvania until the question of jurisdiction is settled.

Mr. Du Puy is now in undisputed custody of the road and is operating the same.

St. Louis, Dec. 12.

The Terre Haute, Alton & St. Louis Railroad was to-day passed by the Directors into the hands of Charles Butler and John Wilkinson, of New York, Trustees for the second mortgage bondholders. The Trustees have placed the road in the hands of William D. Griswold, who is to be appointed Receiver, and who will have the entire management of the road. The bondholders are to advance money immediately, to put the road out of all difficulty. The details of the arrangement, which has been made amicably, will soon be made known. There is no doubt this is the best thing that could be done for all parties interested.

VIRGINIA FINANCES AND R. R.

Governor Wise in his parting Message to the Legislature, recommends an appropriation of two millions per annum until the work on the Covington and Ohio Railroad is finished to the Ohio. Also, that the other works should be classified according to their state of completion. The Charlottesville and Lynchburg road is nearly finished; the Norfolk and Petersburg road is finished; the York river road has reached the Pamunkey; the Danville road will soon be connected with the works of North Carolina. He recommends for the next two years the following appropriations:

To the Covington and Ohio Road.....	\$4,000,000
To the Manassas Gap Road.....	200,000
To the extension of the Danville Road.....	200,000
To the clearing James and Appomattox rivers....	150,000
To all other works, as it may be distributed.....	450,000

Total recommended.....\$5,000,000

Of the decline in the market values of Virginia State Bonds, Governor Wise says:

I earnestly ask the Legislature to provide by general law against the failure to pay interest punctually on our guaranteed bonds. The bonds of the State at one period the present year went up above 99 in New York, and so continued until about \$67,000 only of the interest due on the guaranteed bonds of the James River and Kanawha Company fell due in July, and failed to be paid. The last General Assembly had made provision up to that day only; and though there was plenty of money in the Treasury, there was no authority of law in any functionary to pay this interest. Our bonds sank immediately to 96, and since to 93 in the market. I recommend that authority be given the Executive to pay the interest on them as it may happen to fall due.

I recommend that in future, so far as it can be done consistently with existing engagements, the interest due upon our State bonds and all debts be paid at our own Treasury in Richmond, and not elsewhere.

That the mode and rate of borrowing money and selling their securities, by joint stock companies, be prescribed and regulated by law so as to conform better to the conservation of State credit.

Governor Wise is opposed to any modification of the Usury Laws. He has not yet learned that the existing trammels upon the use of capital have an injurious effect. He recommends

That the rate of legal interest be not changed, and that the Usury Laws be not relaxed. The bankers and brokers, and money changers and capitalists in New York may clamor for the abolition of Usury Laws, for the obvious reason that they have the center of trade, to which the flow of money tends, and the money there is the money lent; but the provincial people and the States are the borrowers.

Governor Wise has studied Political Economy to little effect when he urges the people of Virginia "TO BUILD UP CENTERS OF TRADE FOR THEMSELVES." Virginia is now expanding and becoming rich by the use of thirty millions of borrowed capital, two thirds or more of which were borrowed in or through New York. Our readers may form some idea of his views of the "Balance of Trade," etc.,

from the following extracts from his Message No. 11:

1st. That the capital employed in trade flows to the centers of trade.

2d. That it flows there in spite of what is called "*the balance of trade.*"

3d. That a balance of trade in favor of States producing the raw materials, against the commercial centers, instead of being a strength, is a weakness in times of money pressure or crisis.

4th. That the best defence a State or people can have against the tax of paying *exchange* to centers all around them, and against the danger and dismay of having their surplus or balance of trade caught under the dead fall of hard times in centers outside of their control, is to build up centers of trade for themselves within their own limits, by husbanding their credit and constructing works of improvement.

5th. That we ought not to attempt to draw capital from other States or sections, by raising the rate of interest on money.

The report of the English Committee of Erie security-holders was favorably received in London, and the scheme of reorganization put forth by the Directors was generally satisfactory. A meeting was to be held on the 29th, to consider the plan, when it was believed a large amount of subscriptions would be made.

The people of Rockville and Park county, Indiana, are actively engaged in procuring subscriptions for the extension of the Evansville and Crawfordsville Road from Terre Haute northward. It is thought that a sufficient amount will soon be realized to put the work under contract.

MESSAGE OF GOVERNOR STEWART OF MISSOURI.

Gentlemen of the Senate, and of the House of Representatives:

Having constantly mingled with your constituents during the last few months, you have doubtless sought and obtained from them the information, the want of which occasioned the adjournment of the General Assembly. From the expressions of the people, so far as any has been obtained, you have probably seen that a large majority are in favor of the completion of our railroads; that, within a reasonable margin of the limitation of the State debt, it is manifestly the wish of the people that State aid shall be given in such manner as will be most certain to secure the desired end, and best calculated to protect the interests of the State. The people are evidently convinced, that, so far as the finances of the State are involved in our railroad enterprises, there is less liability to loss in a further effort to complete them, than in withholding the aid it is in the power of the State to give. Everywhere our citizens are manifesting their appreciation of the advantages of railroad facilities, and are awakening to the importance of obtaining, at the expense of a liberal outlay, immediate or even proximate railroad accommodations. Private enterprise is now making the most vigorous efforts where, a few years ago, the people were almost wholly indifferent to public enterprises. The people now seem to realize the fact, that the completion of our great

trunk roads will fix the position of Missouri as the *Central Empire State* of the Union; and that the failure to complete will inevitably put her in the position which the enemies of system have supposed their completion will do—a condition of oppressive taxation, crippled energies, and retarded prosperity.

While the people, by private means, and through county subscriptions, are ready to contribute liberally, it is evident that State aid is also necessary; and with what can be given, the people will push the roads through at an early day. Then, from the border of Kansas to the Mississippi, and from Iowa to Arkansas, the State will be intersected by the iron track, and become the great Central thoroughfare, of the nation. Nor will the spirit of public enterprise be arrested in its efforts by the completion of these trunk roads. They have created an impetus that, at no remote period, as in many of our sister States in the West, will give us an iron net work, supplying railroad facilities to every portion of the State. And these branch roads will serve as so many feeders, and add immensely to the business of the roads, to the construction of which the State has so largely contributed at a time when aid could be obtained in no other way, and without which the *car of progress* would yet have been almost or wholly a stranger in Missouri.

It is needless now to refer to the causes which, during the incipency of our system of Internal Improvements, made it impossible for us to enlist capitalists in our enterprises, while other States could in theirs. It is a fact known to all who have any acquaintance with our earlier efforts. The only alternative was the one adopted; and the result of our resorting to this has given Missouri a name which she could have attained by no other means, until a period indefinitely in the future. The rapid increase of population, the thrift, the spirit of improvement, the enhanced value of property, and the luxuries of life now enjoyed in our midst, would have been reserved for a future generation.

Nor has the foolish cry of oppressive taxation any justifiable basis. Improved facilities for transportation and travel, through a productive and cultivated country, carry with them more than equivalent for their cost, in the enhanced value of its products; to which are added inducements for the occupancy and thorough improvement of *all* the available resources of the country, increasing both the quantity and value of taxable property, and furnishing to the neighborhoods through which they pass, at a trifling individual cost, the physical conveniences, the means for mental and moral culture, and the social advantages and enjoyments, without which civilization is comparatively a blank, subserving no other end, than a crude supply to the masses, of their physical necessities.

A cursory glance at the history of any community within our knowledge will indelibly impress this fact upon the mind—that just in proportion as a community is provided with facilities for reaching market, furnishing an easy, expeditious and cheap mode for a commercial interchange of commodities, does that people become industrious and prosperous; and that, in the same ratio, do means for travel, and the consequent commingling of different communities tend to the increase of general intelligence, promoting an enlightened and liberal public sentiment, and augmenting the sum of human happiness.

The chief objection urged against a further increase of the public debt is the danger of taxation. As has been repeatedly stated in former messages, if the burthen of the entire

debt incurred by the loan of bonds to our railroad companies should ultimately fall upon the people, they will have received an equivalent in the enhanced value of property; and the means for the payment of the incidental increase of taxation will also be realized, manifoldly, in the increased value of marketable products.

No argument is necessary to show that lands are valuable just in proportion to their proximity to market, or to facilities for reaching the market. Land so remote from market that it costs more to transport its products to the place of consumption than their market value, is, in this condition of things, worse than valueless for agricultural purposes. If so located as that the transportation of its products is equal to their market value, it is commercially worthless. If located where the cost of transportation is equal to three-fourths of the market value, its occupants in a pioneer condition—effectually cut off from nearly all the advantages of commerce, and illy remunerated for their toils and privations. But just in proportion as the distance from market, or the cost of transportation is diminished, does the value of marketable commodities increase at the place where produced, and the cost of transportation is lessened in proportion to the increase of facilities—the comparatively easy and speedy mode of conveyance. Thus, because of the difference in the value of its products, land which, before the introduction of railroads, was worth only three to ten dollars an acre, and with difficulty sold at its nominal value, is now, by reason of railroad facilities, readily sold at fifteen to fifty dollars an acre. In many instances the increase is even much greater; while in others, and in the ratio of remoteness from improved facilities, is the sense of the appreciation less. Where land has advanced in value five fold, it is because the profits realized, upon its products are, or can be made to be, five times what they were. If it costs forty cents to raise a bushel of wheat and fifty cents to transport it to market, and its market value was one dollar, the producer made a profit of ten cents per bushel, or realized ten cents for the use of the ground on which that wheat grew. But if, while the cost of production is no greater, it costs only ten cents to carry it to market, the producer realizes a profit of fifty cents per bushel, or five times as much as formerly; and the land is worth to the one who cultivates it, five times its former value. They more speedy conveyance also gives him an earlier return, and the certainty attending transportation by railroad, enables the shipper to regulate his movements by the condition of the market. These are additional advantages that are often important. The consumer also enjoys the advantage of cheap transportation upon the merchandise he needs; and he buys of his merchant at a smaller advance upon the wholesale rates (besides the difference in the cost of carriage) because, as the merchant can replenish often, he is not obliged to add to an otherwise "living profit," a large percentage on stock on a stock laid in many months in advance of sale. These advantages, it is easy to see, increase the value of land; and, altogether, add largely to the ability of the tax-payer, who, though taxed according to the increased valuation of his property, has, after paying his additional tax, a large percentage of his increased profits left.

But leaving out of the account the saving in profits upon products, and of interests upon capital invested, the single item of the value of time saved in travel, by citizens of the State, will be more than equal to the State debt incurred in the construction of our roads. And,

it being conceded that time is money, the time saved is so much added to the aggregate wealth of the State.

If it is urged that property holders can not so easily hold on to unimproved and unproductive lands, when the taxes are increased upon them, let those who suffer the inconveniences of a sparse population, growing out of the fact that they are surrounded by lands held by non-resident speculators, say whether the larger taxes of cultivated fields, domiciliary improvements, herds and flocks, and incidental personal property, would not materially assist in building roads and bridges, school houses and churches. And whether a denser population would not add greatly to the social advantages of their neighborhoods—scholastic, religious, diversity of employments, and in the convenient interchange of neighborly offices. Let citizens of counties that have a scanty population, and large bodies of unoccupied lands, say whether the occupancy of those lands by thrifty farmers, would not help them to build jails and court-houses, and the bridges that are a county tax.

Taxes! If, in giving further aid to our railroad companies, the State debt is increased four million dollars (which is all that, perhaps more than can be done) it would amount to about four dollars to each person in the State—an average of about twenty dollars per family; and the interest per family, at 7 per cent., (about an average, allowing for the discounts on bonds,) would amount to one dollar and forty cents per annum. Shall we refuse this amount of aid to our railroad enterprises, with the prospect before us that it will secure the tax-payers of the State against any taxes upon a debt of thirty millions, when a refusal to grant this pittance will certainly entail more than half that amount of debt upon us, and all the incidental evils before referred to? Could we, on the score of political economy, perpetrate a greater folly? Shall we refuse this little additional aid, in view of the fact, that the roads themselves will be taxable property at their fair valuation, and that their early completion will stimulate other railroad enterprises in the State, the property of which will also be taxable? Shall we with a miser's grip, hold on to the four millions, and crush the spirit of enterprise from which so many advantages are derivable? If the state is ultimately saddled with any portion of the debt incurred in the loan of its bonds, the taxes upon the tributary roads, with that upon the trunk roads now in progress, will assist in bearing the burden; indeed, would soon pay a larger tax than the State is in any danger of having to pay upon its railroad bonds—a view of the subject that seems to be almost wholly overlooked.

The advance in the price of lands along our several railroad routes, is known to all. And this is realized wherever a railroad or any improved mode of conveyance is constructed, even where the lands are poor, comparatively, and all previously under cultivation. How much more, then, may we not expect from our internal improvements, through lands of unequalled fertility, and mineral deposits such beyond comparison, and inexhaustible.

And this enhancement in the value of property and increase of wealth, will be permanent, and in the West, for a very long period, must be constantly progressive. To the earlier settlers prices of property now, in many instance, seem exorbitant; but the process of appreciation in real value has scarcely commenced. This will be more manifest by a reference to the experience of older communities. The following table, compiled from authentic sources, shows the assessed value of real and

personal property in the city of New York, for each year, from 1815 to 1856. It affords a most conclusive argument in favor of Internal Improvements, and, beyond the possibility of any successful assault, vindicates the wisdom of the policy adopted in this State, and which now needs the fostering care of government to a limited extent to become a triumphant success.

ASSESSED VALUATION OF REAL AND PERSONAL PROPERTY IN THE CITY OF NEW YORK FROM 1815 TO 1856.

Date.	Amount.	Remarks.
1815	\$ 40,536,492	Peace with Great Britain.
1816	82,674,901	
1817	72,892,725	
1818	80,245,001	
1819	70,134,061	
1820	69,530,753	
1821	68,282,000	
1822	71,289,144	
1823	70,940,820	
1824	83,075,676	
1825	100,160,046	Erie Canal opened throughout.
1826	107,477,780	
1827	112,211,926	
1828	114,019,333	
1829	111,016,026	
1830	126,228,518	
1831	139,280,214	
1832	145,312,718	Ohio Canal completed to Ohio river.
1833	166,485,127	
1834	186,548,511	
1835	218,723,703	
1836	309,591,920	
1837	263,747,350	
1838	261,152,941	
1839	266,729,230	
1840	252,843,163	Western Railroad of Massachusetts completed—diverting trade from New York.
1841	251,777,902	
1842	237,806,901	
1843	227,997,091	New York Central Railroad completed to Buffalo, connecting Boston with Lake Erie.
1844	235,960,447	
1845	239,932,318	
1846	244,952,505	
1847	247,152,746	
1848	254,192,027	
1849	256,217,093	
1850	286,085,416	Hudson River Railroad completed.
1851	320,108,358	New York and Erie Railroad completed.
1852	351,706,796	
1853	413,631,443	In addition to the two roads above named, 1,041 miles of railroad were completed, in the years 1850 to 1855, inclusive.
1854	462,021,734	
1855	486,998,188	
1856	511,746,491	

It will be seen upon inspection, that no advance was made on the assessments from 1815 to 1823, (during which time New York had no internal improvements) but that, on the contrary, they decreased in those eight years \$11,000,000. In 1824 a considerable part of the Erie canal was in operation, and the assessments advanced \$12,000,000. In 1825 the Erie canal was completed, and they increased \$18,000,000 more. They then advanced at the average rate of about \$6,000,000 per annum, until 1832, when the completion of the Ohio canal, which extended the influence of New York to the Ohio Valley, caused the assessment to rise, for three years, at the rate of \$24,000,000 per annum; while in the next year (1836) they rose the almost incredible amount of \$90,000,000. This was, however, an excessive and unwholesome growth, and the terrible financial crisis which followed, together with the great fire which destroyed such an immense amount of property, not only arrested the advance, but put back the dial of prosperity for a time, so that in 1840 the assessments had fallen \$57,000,000 below those of 1836; being less than \$253,000,000, though still \$106,000,000 more than in the year the Ohio canal was completed. In the following year the Western road was completed to Albany, connecting there with the Erie canal, and in 1843 that road, now known as the New York Central, was extended to Buffalo. The New York assessments consequently fell to less than \$228,000,000, a

lower point than they touched since 1835—eight years before.

But New York, now seeing the advantages accruing to other points from direct railroad communication, in the increase of commerce and the enhanced value of property, became thoroughly aroused to the importance of a railroad system centering in that city, and commenced the Hudson River Railroad, revived the New York and Erie, which had been suspended, and began the construction of numerous other works of minor importance.—Upon the completion of the first of these, in 1850, the assessments rose \$30,000,000, and with the opening of the second, in the following year, \$34,000,000 more; and since that time with similar gigantic strides, that great city has marched on without faltering. Ten hundred and forty miles of railroad, besides the two named, were opened to public use in the State of New York from 1850 to 1855 inclusive, all tributary to the great metropolis.—No prophet is required to predict her future, for she holds her destiny in her own strong grasp; and the truth-telling figures above given indicate the nature of the foundations on which her prosperity is based. No man who examines them without prejudice can doubt that they are the railroads and canals which bring the wealth of an empire to her doors.

The city of New York in 1696 had a population of 4,300, which was about the same that St. Louis had in 1820. It took the first about 130 years to attain a population of 180,000, which St. Louis has reached in 39 years. In the past eight years the assessments in St. Louis have increased from \$30,000,000 to \$86,000,000, being now \$3,000,000 more than those of New York in 1824, the year before the Erie canal was opened throughout. With the completion of the carefully planned works which constitute the Missouri system of Internal Improvements, and their inevitable and almost illimitable extension into our sister States and Territories, a similar result to that which New York experiences has foreshadowed will, in due time, become a part of our own history. St. Louis, by her geographical and commercial position, must be the distributing and manufacturing center of the Great West—the *Central Empire City*—the real metropolis of a region whose agricultural and mineral resources are almost boundless in extent and richness.

Nor has St. Louis been unmindful of her obligations to aid in the construction of these works, which, while they enrich the whole country through which they pass, must also pour wealth into her own lap. She has contributed in municipal and individual subscriptions \$7,500,000 to railroads, and also, without grudging, has paid her quota of taxation, which is a very large one, towards a relief of the State's burden. With the additional power which the completion of these works will give, she will be enabled to aid more efficiently the further development of Missouri; and her past efforts indicate that she will not be wanting in liberality towards this important end.

The preceding figures prove conclusively, that the canals and railroads leading to the city of New York, far more than paid for themselves, by the increased wealth of that city alone. The calculations have been confined to that city, on account of the space that would be required to extend the investigations to the whole State. If this were practicable, the result would be startling and almost incredible. It was estimated before the opening of the Western Road of Massachusetts in 1840, that the Erie Canal (which had been opened through only fifteen years) had paid for itself

in the increased value of real estate, within the State of New York, four hundred times over. Mr. Andrews, in his valuable report to the secretary of the Treasury, on the Colonial and Lake trade, estimates the increased value of agricultural lands in the United States, by the construction of railroads, as equal, on an average, to \$7.50 per acre on a belt extending ten miles wide on each side of the road; or \$96,000 per mile; (leaving out of the calculation the enhanced value of property, less in amount, over a greatly extended area on either side and beyond the road;) and our own experience in Missouri proves this to be a very moderate estimate; for, as suggested above, the influence of these works extend far beyond the distance named; and the average increase within the belt is larger here.

Since the surveys of the Pacific Railroad were made, the assessments of Pettis county have increased from \$649,000 to \$4,050,000; and those of Johnson county, from \$749,000 to \$5,500,000, from 1852 to 1858—six years. This increase, in these counties, which lie entirely inland, and away from the river navigation, has been in a great measure produced by the benefit received or anticipated from this work. As the extent which the road runs through these counties will be about sixty miles, the increase has been already equal to \$135,000 per mile, although not a mile of road is in use in either county. It is a very moderate estimate to say, that one half of this advance is due to the railroad, directly or indirectly; yet this hardly indicates what may be expected from the completed road. And this is shown by the results along the whole line of the Hannibal and St. Joseph Road, and on the others as far as built.

The roads of Massachusetts increased the valuation of that State, between the years of 1840 and 1850, from \$290,000,000 to \$580,000,000, and this is an old and populous State, where the lands are generally poor, compared with our own. The Nashville and Chattanooga Railroad, almost immediately after its completion, created a value by its influence on real estate, equal to about five times its cost.

And these results, which appear so large, when applied to agricultural lands, are far exceeded when applied to mineral districts. It is believed that no State in the Union, east of the Rocky Mountains, contains such vast and varied mineral wealth as Missouri. Iron, lead, copper, zinc, and coal, are scattered over the State, and found in boundless profusion. We have every element that commerce requires, except the means of bringing our productions to a profitable market; and railroads only can supply the necessity. Already they have done much, but that which has been accomplished is nothing compared with the promise of the future, if we are only true to ourselves, and worthy of the rewards which have been placed within our reach by a bountiful Providence.

An impression prevails to some extent that the benefits accruing from the construction of the trunk roads to which State aid has been extended, are restricted to limited belts through which they pass, and, therefore, partial in their influence upon the prosperity of the different portions of the State. But a careful examination of a map of the State will convince any one, that the same amount of railroad facilities could not be located so as to distribute their benefits more equally. The region on the southern line of the State, midway between the South-east and South-west, is perhaps less benefited than any other; but,

with that exception, the distribution to the several sections seems to be as equal and just as it could easily be. It is nevertheless true, as conceded in a former part of this message, that localities more remote from the roads derive less benefit than those which are nearer; but they are taxed accordingly. And no locality is entirely excluded from the advantages of facilities already afforded. Can any part of the South-west be singled out that would be willing to be deprived of the facilities for travel or transportation which the Pacific Railroad affords, even now? Could the South-east be induced to dispense with the conveniences now afforded by the Iron Mountain Road, and those they are sure to possess in the immediate future by means of the Cairo and Fulton Road? Would any portion of Central Missouri be willing to part with the facilities and pecuniary advantages resulting from the construction and operation of the Pacific and North Missouri Roads? Or could the people of Northern Missouri, anywhere from the Iowa line to the Missouri River, be induced, for any consideration, to part with the facilities the Hannibal and St. Joseph and the North Missouri Roads furnish them. Let the representatives of the several counties recur to the past, compare it with the present, and then as statesmen, as political economists, and as practical business men, answer these inquiries.

Again, the idea is entertained that because certain lines of road have had State aid, any and all others are entitled to the same. It is evident, however, that this could not be given without increasing the debt of the State to a magnitude that would destroy its credit; but if we would do this, the constitutional limitation now interposes an insuperable barrier. And it may be justly assumed that every railroad that may be built, connecting itself with either of our trunk roads, has received State aid. The Orange Valley and Southern Kansas road will derive all the advantages it could if the Pacific road had been built by the State to Tipton for its special benefit. This illustration will serve for all other similar enterprises. If they connect with any of our present roads they will be thereby brought into railroad communication with other portions of the State, and of the Union, as much so as if the roads with which the connect had been built from St. Louis to the point of connection for the benefit of such enterprises. And besides, the trunk roads will have stimulated enterprise, brought capital into the country, caused the lands to be improved, and towns to be built, and excited a spirit of competition that will result in furnishing a large amount of means to the additional roads here contemplated. In these ways the State will have, directly and indirectly, contributed largely to further works of internal improvements.

In the present condition of affairs, then, it would be unwise and unstatesman-like for legislators to refuse to do all that can be done towards completing the roads now in progress, simply because they do not run through their immediate neighborhood or district of country. And those whose section of country already enjoys railroad facilities which State aid has contributed to furnish, would be liable to the imputation of extreme selfishness in refusing to vote assistance to roads in other sections yet incomplete.

Nor should those whose convictions would lead them to sustain our present system, as far as possible, be deterred by the determined and violent opposition of a few who are now sounding the alarm about taxation. They have ever been opposed to any system of internal

improvements, and only change their tactics to suit surrounding circumstances. That many persons have been alarmed by the outcry can not be doubted; but that alarm has in a great measure subsided, and as you have undoubtedly seen, the "sober second thought" of the people is in favor of a liberal policy.

Bad management on the part of some of our roads, and unwise contracts, have also had an influence upon the public mind, creating strong prejudices; but with these obstacles removed, the objections should cease, as neither the contracts nor the alleged lavish expenditures in other respects necessarily attach to the system. They can be avoided, and should be carefully guarded against in the future. Every extensive business involving the necessity of agents or clerks is liable in some measure to mismanagement from incompetency inability to foresee all that is incidental to the adventure, or from dishonesty. Our Internal Improvements could not reasonably be expected to be wholly exempt from misfortunes that are common to all kinds of business; but this is no reason why we should increase our hazard, or so manage as to make the worst apprehensions of the timid an inevitable evil.

It is a matter of history that very few works of Internal Improvement have ever been conducted under the sole directions of government that have not resulted disastrously. It is, therefore, evident that it is not the true policy of Missouri to take possession of the roads forfeited to the State, with a view to permanently undertaking their management. But if it is thought advisable to relieve the companies for a time from the penalties of forfeiture and to extend further aid in order to their completion, it will be both just and wise to grant such aid, upon the condition that the State is allowed a voice in the several Directories. Companies, the largest share of whose means have been obtained through the sale of State bonds, could not justly object to this, if it is demanded.

Since the adjournment of the General Assembly, I have, in conformity with my duty, extended every legal facility possible, to keep our railroad enterprises alive, and to urge forward their construction. And this has been done against the advice and remonstrance of the enemies of our Internal Improvements. I have given every facility in my power, to the present energetic Directory of the Pacific Railroad, to enable them to progress with the construction of the South-west Branch, which has been pushed forward during the recess with laudable vigor. Early in the season I placed in the hands of an agent, nine hundred of the bonds authorized to be issued in behalf of that road, making eighty-six cents the minimum rate of sale. Up to the 7th inst., three hundred had been sold at the price named, and the proceeds applied to the construction of the road; and the prospect is, that all can soon be disposed of on as favorable or better terms. It is hoped that the action of the General Assembly may not throw any obstacles in the way of the anticipated further sales, or of the rapid progress of that very important road.

While referring to the South-west Branch Road, it may be proper to allude to an opinion entertained by many, that the General Assembly was the power to dissolve the relation of the two branches, making their interests distinct, and giving them a separate Directory; in short, to make them two distinct corporations. A moment's reflection will enable any legal gentleman to see that vested rights have already accrued to the Pacific Railroad Com-

pany, of which it is not the province of the General Assembly to divest; and that a division of the interests involved can not, therefore, be accomplished by Legislation. Any efforts to that end could only result in protracted litigation, to the great detriment of all the parties concerned.

Before concluding my remarks upon the subject that is likely mainly to engross your attention during the present session, I beg leave briefly to refer to the opinion entertained by some, that we have no right to entail a public debt upon posterity. But if we undertake any public enterprise necessary for the common good, that will benefit our successors as much as ourselves, it is difficult to see any injustice in imposing upon them a part of the burden, proportioned to the benefits. The rule of action forbidding this, would greatly restrict our usefulness, because it would preclude the possibility of the accomplishment of many works of utility, permanent in their character, and therefore equally serviceable to posterity as to ourselves. By this rule of action, we would be prevented from incurring debt in the rearing of public edifices which are to last perhaps for ages, and subserve the interests of many generations; and so of city sewerage, culverts, water works, public landings, and many other public improvements, demanded by commerce, or needed for sanitary purposes, equally valuable to a future generation, and which the present generation could not altogether supply, except through the means of public credit. We would also be forbidden to incur a debt necessary in carrying on a defensive war in which our liberties and sacred rights might be preserved and become the heritage of our children. It is not contended that we have any moral right to incur debt recklessly or needlessly. And it is clear that, beyond the measure of benefit, we have no right to incur the heritage of those who take our places.

With agricultural resources unequalled by any other State in the Union; with soils of unsurpassed fertility, variously adapted to the production of nearly all the necessaries of life, and eminently so to most of the marketable staples, including all the cereals, corn, hemp, tobacco, the various grasses, and every description of fruits, including the grape, for the production of which a portion of our State is equal to any portion of Europe; and with mineral resources boundless in extent, embracing all the most useful metals, (the possession of which tends greatly more to the permanent prosperity of a country and than the precious metals,) together with many of the minerals of a secondary importance, it becomes alike our duty and our interest to provide facilities for transportation suited to the development of these resources, and the spirit of the age. A ten-fold increase of the population now in the State would add to the prosperity of those already here; and while the several States are all holding out inducements for immigration, shall we, with our superior advantages, remain listless, and let the active, eager millions of human beings who are thronging the thoroughfares of the country in pursuit of subsistence and a home, pass upon the right and left, and thus allow our millions of acres of virgin soil, and our inexhaustible mines of coal, and deposits of iron, lead, copper and other minerals, to remain a useless expenditure of the munificence of heaven? Do we not enhance the value of the heritage of our successors, and contribute to the general good, by public works of permanent utility, that will bring these vast resources into use?

But the question, in the present state of

things, is not, virtually, whether we shall burden posterity with debt, but rather, how much of the debt already incurred can we, by judicious management secure the liquidation of, in accordance with the original intention. I believe that every dollar of it can be thus provided for. It is only necessary that this General Assembly shall will it, and devote their abilities to its achievement.

One very important result accomplished by the construction thus far of our present rail roads, is that of having made the people acquainted with their utility. The increased value of property, and the general prosperity caused by the introduction of this system, has produced the conviction upon the public mind, that the best possible way of advancing the interests of individuals is to contribute a portion of their private means in aid of public enterprises. This result is already observable in various portions of the State, where railroad projects are received with great favor, and, where cash means can not be commanded, lands are freely subscribed or mortgaged, in the full belief that the portion of landed property reserved will, with railroad facilities, be worth more than the whole estate would have been without them.

The fact is a verification of the axiom, that duty and interest go hand in hand. It is unquestionably true that public and private interests are so blended, that, in promoting the former, according to our means, we also promote the latter. In the more ordinary demands upon our liberality in behalf of public measures—the building of school-houses, churches, county buildings, and common roads and bridges—this principle of economy is more generally understood and appreciated. But it is equally applicable to this more modern economy. The magnitude of the enterprise at first excites timidity and distrust; but by a little experience these are dispelled, and the mind is aroused to the fact that this is an age of progress; that a stand-still policy is no longer safe or desirable; in fact, that it is impossible to stand still; that if we will not advance, we must retrograde in the various elements of prosperity. These are the convictions which our public works have forced upon the citizens of the State; and this single effect, in no very extended period, will add more to the wealth of Missouri than our roads have cost; and it insures the completion of our present enterprises with what the State can yet do.

YE ANATOMIE OF YE ENGINEERE.—The *Indian Punch* has the following:

Although an arch man yet he is never forgetful of gravity; and though he dameth and blasteth more than any other man, he piqueth himself on being always correct in his terms; he is a dab at algebra, for which a YZ is needful; he is a very Noah at describing arcs. Though he seeketh not after taverns, he is conversant with sines, and payeth due attention to his couzines and sick aunts. Even though not wealthy, he helpeth to establish many a bank. He, ever kind and hospitable, supplieth chairs for sleepers, and though addicted to rail, is never forgetful of the tender; he is a dutiful subject, and though often in hot water, ever payeth attention to the governor. He is somewhat of an ornithologist; knoweth all about cranes, crows, kites, tumblers and cocks for hengines, and moreover maketh wire ducks to aid his resonant steam eagles to fly. He is also a somewhat of an entomologist; understanding flies, crabs, worms and such likes, and not above taking notice

even of a crow's ticks. Though partial to hydraulics, he is not otherwise a rollicking man, yet is at home in high-dressed attics, where he often maketh use of mattocks in his area speculations. He is a peaceful man, though well versed in triggonometry, and in the habit of making great use of switches in various ways. He is of leveling tendencies, though sometimes wishes he were monarch of all he surveyed. He is the most progressive of mortals, axing his way through forests, and picking it through rocks; and paradoxical as it may seem, he opens a country by putting locks on the rivers and keys on the banks. He is by no means a hater o' docks man, but well versed in dry dock trinal subjects, and would never desire to pull down the church unless it stood in the way of a railroad. He reverenceth the institutions of his country, because in them he recognizeth the mechanical powers. The press he rightly regardeth as the lever; the ten pound voters as the small end of the wedge; the House of Lords as the inclined plane, and the commons as the serew; the army he conceiveth to be both hammer and tongs combined, the navy a series of pulleys, and country justices, in general, pumps. His affection for the constitution is unbouded, for he only regards it in the light of the common wheel.

MAGNETIC APPARATUS FOR ADDING ADHESIVE FORCE TO DRIVING WHEELS.

Almost all locomotives that have been built heretofore, have an excess of steam power over their adhesion; and where this is not the case, the great weight that necessarily ensues, in some cases amounting to several tons beyond what is required for the proper strength of the parts, is not only an unnecessary load to carry every mile that the engine travels, but is so much dead weight producing impact by which the track and bridges, and in fact the whole superstructure is sooner or later destroyed.

The difficulties railway companies experience are manifold from the use of heavy engines. Not only the track is destroyed, and the bridges impaired, but the machinery itself more readily wears out its own parts by their great weight, and much more lubricating material is required; but railway managers find themselves forced between the two horns of a dilemma; for if they use light engines, there is not adhesion sufficient to draw the heavy loads necessary to a profitable business; while if heavy machinery is employed, it works its own destruction and that of the track on which it moves.

The destruction of superstructure due to locomotives of great weights has been carefully computed by the learned commissioners appointed by the States of New York and Massachusetts, and by several other eminent engineers, among whom may be mentioned my friend William Raymond Lee, who has accomplished much to put this important question in its true light, as has also Mr. McAlpine and Charles B. Stuart, and others, and it has been found that the depreciation from this cause amounts to upwards of \$26,000,000 per annum in the United States alone.

Appreciating these difficulties, I went to work to see what could be done to remedy them, believing that science and experience combined could surely correct such grave errors, as there must be in a system that resulted so destructively to its own best interests, and to this end I drew upon the intelligence of all

my good friends in this country, Canada, England, France and Germany.

The replies, without exception, were, "You must increase the adhesion of the driving wheels without adding weight to the engine." This was known to be necessary; but how to do it was the difficulty; and although some encouraged the hope, and others suggested the belief that it could be accomplished by various mechanical contrivances; nothing was proposed, however, that had not before been tried, and I was about to give up the investigation of the matter, and consider the case as one of those inevitable troubles that surround everything in some form, when reading the researches of my friend, the eminent philosopher, Dr. Henry, I was led to suppose that magnetism in some way might come to the rescue.

I was aware that attempts had been made in England to render the driving wheels permanently magnetic, and that the engineers of the *Chemins De Fer Du Nord*, in France, had tried various forms of electro-magnetic helices, but all these attempts had proved failures. I therefore set about making inquiries in this direction, from those best informed in that branch of physical science to which this subject belongs. I met, however, with little to hope from, perhaps, because of the preconceived idea, in one sense true, that a ring could not be magnetized; but struggling on, as one trying to find his way in an unknown place in the dark, and success has at last crowned the effort.

The apparatus consists of a helical coil of copper wire or some other proper electrode placed transversely to the wheel and around the lower segment, in such a manner that the wheel may revolve freely within it without at any point coming in contact with it. The helix is sustained in any convenient way to the frame of the engine, and consists in the experiments tried of about 300 turns of No. 8 copper wire, insulated with cotton and marine glue.

One peculiar feature of the helix is, that it is a segment struck from a radius of the diameter of the wheel, which was found to be necessary in order that the greatest magnetic effect may coincide with the point of contact between the wheel and rail.

My first battery consisted of sixteen Groves cells, so modified that they would not stop by the motion of the engine; each cell has about 300 inches of zinc surface, and corresponding opposites of platinum and carbon, and the cells were connected in sets of eight for quantity—sine to zinc, &c. My present batteries are a modification of SNEES and CHESTER's, which are found to be much more convenient.

By this arrangement, with the ordinary thickness of tire, the wheel is so magnetized as to enable the engine to exert its whole steam capacity. With two out of four drivers magnetized, of the engine "*Anthracite*," of the Fichburg company, it was found that there was an increased adhesion of the wheels, and consequently of the traction of the engine, of over 75 per cent. The steam capacity of the engine being nearly double its adhesion without magnetism, enables me to use the whole of the magnetic effect.

I was indebted to Mr. O. D. Vormus, of Boston, for very important aid in the experiments; the troubles and difficulties attending which I shall not weary you with.

The engine "*Lebanon*," of the Central Railway of New Jersey, has two helices of 288 turns of No. 8 copper wire, on the front pair of the four driving wheels, which are four and a half feet in diameter, and the battery is made

in four cells, each having twenty square feet of zinc surface, and eighteen feet of silvered lead coated with platinum, sulphuric acid, (HO. SO₃.) 1, water 12 is used to excite action, and the battery is connected for intensity. I am now preparing a magneto-electric machine to produce the electric current, hoping to dispense with the use of the battery altogether, and if successful, the entire arrangement will be mechanical and independent of chemical apparatus. Some of the engines of the Central Road of New Jersey, and the Erie Railroad of New York, have from three to five tons dead weight of cast iron, that can be taken off, and has been put on to give adhesion, and is otherwise useless.

This arrangement not only saves the great additional useless weight carried, and which is detrimental to the superstructure, but enables the engine to ascend high grades. With a model, an ascent of a plane of 300 feet to the mile is readily made when the wheels are magnetized. The same model will not go up a grade of eighty feet to the mile without magnetism, because the wheels slip. The model is merely illustrative, and is capable of carrying about two hundred pounds.

The following is the test applied to the *Anthraxite*:

Engine chained up.

Slipped wheels on clean track in good condition; circumstances every way favorable to traction, without magnetism, 50 lbs. steam to the inch.

All the conditions alike and two wheels magnetized, slipped with 88 lbs. of steam per square inch; slippery track, 19 lbs. less steam to the inch. without magnetism; same conditions, with magnetism, required 35 lbs. steam to the inch.

The engine weighed 22 tons net, and the additional traction produced by the magnetism was equal to 17 tons of dead weight, but did not weigh anything.

The "*Lebanon*" drew a coal train on a slippery rail equal to that which was being moved by another engine that weighed about 15 tons more, and both starting together, the *Lebanon* kept out of the way of the other for some forty miles or more, when a leak occurring in the fire-box, sufficient steam could not be made to turn the wheels, and eight of the cars had to be taken off. The train had, however, previously passed the heaviest summits of the road. —*Journal Franklin Institute.*

(From the Charleston Mercury.)

FRENCH BROAD RAILROAD.

In the *Charleston Mercury*, last August, appeared (taken from Asheville, N. C. *News*, of the 4th of August, 1859), the proceedings of "A Meeting of Railroad Directors," to this effect:

By appointment, a joint meeting of the Presidents and Directors of the following railroad companies, viz: the Cincinnati, Cumberland Gap and Charleston, the Greenville and French Broad, and the Spartanburg and Union, was held at Hendersonville, in North Carolina, on the 28th ult.

On motion, Gen. Alexander B. Smith, of the Cincinnati, C. G. & C. Railroad, was called to the Chair, and Isaac B. Sawyer requested to act as Secretary.

A committee was appointed to "prepare business for the action of the meeting." The committee made a report an adjourned meeting, in which they state that "they feel confident that the following estimate may be made."

From Spartanburg Court House to Butt Mountain thirty four miles, at \$14,000 per mile \$496,000
Next ten miles at \$40,000 per mile 400,000
Thirty miles to Asheville, at \$12,000 per mile 360,000
Forty-three miles from Asheville to Paint Rock, at \$30,000 per mile 1,290,000

Total cost of the Road from Spartanburg Court House to Paint Rock \$2,526,000

The available resources of the Company may be set down as follows:

Greenville and French Broad Company—Private subscription \$175,000

Greenville and French Broad Company—Country subscription 325,000

Total \$500,000

The Charleston, Cumberland Gap and Cincinnati Company, to prosecute their work from Paint Rock to Morristown (by an exhibit made by the Treasurer of the Company to the Committee), have on hand to complete a work, the estimated cost of which is \$269,370 20-100, available means to the amount of \$238,600, showing that upon the North Carolina portion of the route, we have already, in tangible means, half a million of dollars, and but \$30,000 to raise in the State of Tennessee to complete the extension of this work to Morristown.

Morristown is said to be 32 miles from Paint Rock, so that the estimated cost of that section of the Cincinnati, C. G. & C. Railroad is \$8,417.81 per mile while the cost of 149 miles of road, crossing the Blue Ridge, is estimated at \$2,795,399.20, or \$18,700 per mile.

From the eastern base of the Butt Mountain to Paint Rock, a distance of eighty-three miles the French Broad Road is located in a mountainous country, and must encounter the difficulties of construction presented by a country of that character. In the grading of the road bed much rock must be excavated. Certainly everybody will understand that the grading of a road from the eastern to the western base of the Blue Ridge is quite a different undertaking from the grading of a road-bed over the level pine plains between Manchester and Wilmington, or along the line of the Northeastern railroad, or even the of the Charlotte and South Carolina Railroad. It is all the difference between constructing a regular graduated plane across a rugged rocky country, over deep ravines and through rocky ridges which intervene, and shoveling out a shallow road-bed of sand or clay along an entire line of road, the natural surface of which scarcely presents a grade above ordinary locomotive power, and over water courses, the low banks and sluggish streams of which require no more costly structure than a trestle.

Look at the details of the estimate of cost of the French Broad Railroad put forth by the Convention. They cross the Blue Ridge in ten miles at a cost of \$400,000. Col. Gwynn was employed by the State of North Carolina to make a survey and estimate the cost of extension of the North Carolina Western Railroad across the Blue Ridge, by Asheville to Paint Rock, and in 1854 made a report, in which the mountain section extends twenty miles in length, and the cost of that section is estimated at more than \$3,000,000. Col. Gwynn's estimate of the cost of the Blue Ridge Railroad over the Rabun Gap is nearly the same. The crossing of the Blue Ridge in Virginia cost the State a like sum. Will any person believe that the French Broad can be constructed across the Blue Ridge for \$400,000?

The section of the Cincinnati, C. G. and C. Railroad, between Paint Rock and Morristown, is estimated to cost \$8,400 per mile. Is this credible in the face of the fact that the Wilmington and Manchester Road cost \$13,900 per mile; the Greenville and Columbia \$16,000, with equipments; the Charlotte and South

Carolina \$17,600, and the Northeastern \$17,400. Then the estimated cost of the whole road is less than \$19,000 per mile. The Virginia and Tennessee Railroad cost \$29,000 per mile, and the Virginia Central \$27,000. These roads, to say the least, are as favorably located as the French Broad Road.

For a more thorough examination of the pretensions of the French Broad Railroad, the reader is referred to the twelfth and thirteenth numbers of the article of "Blue Ridge" in reply to "Nolamus." CHARLESTON.

The Passenger Railroad Company of Cincinnati, (Third Street Line,) carried 85,677 passengers over the road, during the month of November, and yesterday paid into the City Treasury \$856 77 for the privilege of serving the public with the improved system of passenger transit.

The Cincinnati Street Railroad Company carried 62,393 passengers over the two branches of the route, in the same month of November, and paid from their treasury, yesterday, to the Mayor, \$623 93, as their contribution to the city for thus serving the public.

We understand that the Cincinnati Street Railroad Company and City Passenger Company have, by their respective Committees, agreed upon conditions for the use of the track on Fourth street, between Walnut and Vine, but have not yet signed the contract.—*Cin. Com. 7th inst.*

THE VALUE OF LEGAL SERVICES—AN INTERESTING CASE.—A case of considerable interest, to the profession and the public, occupied the Circuit Court, Judge McArthur presiding, during the greater part of last week. It was the suit of E. G. Ryan, a leading member of the Milwaukee Bar, against Wm. Barnes, Trustee for the Third Mortgage Bondholders of the La Crosse and Milwaukee Railroad, for services rendered in foreclosing the Third Mortgage last spring. For the four months that Mr. Ryan was thus engaged, to the exclusion, as was represented, of all other professional business, he claimed \$12,000 as just compensation. The parties interest paid having him \$1,000, but demurring to the additional amount claimed as exorbitant, suit was brought to recover the balance.

The testimony in the case, which went mainly to the value of the services rendered, was somewhat conflicting. On the one hand, seven, or eight members of the Milwaukee bar, including Mr. Lynde, Mr. Butler, Mr. T. L. Ogden, Mr. S. P. Coon, &c., swore to Mr. Ryan's services being worth, in their judgment, from ten to twelve thousand dollars. On the other hand, Mr. Downer, Judge Hubbell, Mr. Marshall M. Strong, Moses M. Strong, and others, valued them at sums ranging from one to four thousand dollars. The case was very cleverly managed, on the part of plaintiff, by Mr. James S. Brown, while the defence had the benefit of the masterly tactics and forensic abilities of Jonathan E. Arnold, Esq. The summing up of Mr. Arnold, on Saturday afternoon, was pronounced by all who heard it, one of the ablest efforts made at the Milwaukee bar.

The case was given to the jury, under a clear and impartial charge from Judge McArthur, a little after 7 o'clock, Saturday evening, and after being out about twenty-one hours, they came in with a verdict of *seven thousand dollars* for the plaintiff—thus valuing his services (including the \$1,000 already paid) at *eight thousand dollars*. The verdict did not appear to satisfy either side; the defence thinking it much too high, and the other party

regarding it as decidedly too low. The case is to be appealed, we learn, on exceptions taken to certain rulings of the Judge during the progress of the trial. The result will be watched for with interest by laymen as well as lawyers, as establishing a standard for the measurement of the value of legal services.—*Milwaukee Sentinel*.

A RAILROAD LYRIC.

I.

O'er the cloudy station-house
Of the western mountains cold,
Where the sun withdraws his gold,
Stooping his attentive brows,
Stars of signal light are set,
Trains of waiting vapor met,
And the day is darkly done.
In the car of night reclining,
Life awaits the morrow's shining—
Dreams until the morrow's sun—
Deeply dreams and dimly sees
Troops of traveling fantasies.
Life is more than half in seeming,
And the visions of its sleep
Are but shadows of the dreaming
That its waiting moments keep.

II.

Time, time, time,
And the night is past the prime;
But here we stand,
And wait for the wave of the signal hand.

Water boil and fire burn
In the oily steaming urn,
Let the fire and water waste.
They that tarry wind and tide
Safely to the harbor ride;
Ruin cracks the skull of Haste.
Best though life may be in action,
Action is not all in all,
Till the track is clear for traction,
Stand we, though the heavens fall;
Stand we, still and steady, though
From the valve the vapor blow,
From the fire and fuel go.
Who shall dare to antedate,
By a step, the step of Fate?
Fate must traverse, and be shunned
In the train of things beyond;
And to wait may be to do—
Waiting won a Waterloo.

III.

Even so!
Now we go.
Slip the throttle, lock the eccentrics,
Heap the fire with tinder-sticks,
Try the water—all is well!
Beat the quick alarm bell.
Slowly, slowly,
Wheels rumbling lowly,
Off we struggle, gathering motion
Like a wave upon the ocean.
Now our rapid che, che, che,
Beats a quick tune merrily,
Nighted travelers beware,
Of our engine have a care,
Smooth and swift the death behind thee,
Will not spare if it shall find thee.
Past the shops, whose iron clangor
Through the daylight hours resounds,
With a hoarse and roaring anger,
Speed we from the city's bounds;
Onward, through the cave of night,
Boring with our signal light.
Though the sky is gleaming o'er 'us,
We will trust the track before us—
We will trust the iron hands,
Laid and kept by other hands.

So within us and without us
Runs and opens life about us.
Reason shoots a slender light

Through an awful world of night.
Not a star in all the spheres
Shows us of our onward years—
Shows us of the gullied ditch,
Fallen rock, nor open switch,
But, by Faith, we trust the bands,
Laid and kept by other hands.
Faith alone, in act succeeds—
Faith in fixed and ordered parts,
Faith in other hands and hearts;
Faithful follows, faithful leads.

IV.

Crowd the fire, we'll be belated
Ere our flight is consummated,
Tread about and toss the wood in,
Urge the water like a flood in,
Strain the gleaming flues and rivets,
Strain the tugging pins and pivots.
Life is short and time uncertain;
Work or idle as we may,
Death will rise and drop the curtain
On the windows of our day;
Then our fires will be extinguished,
And our vaporing nostril cold,
And our breathless locomotive
To the engine-house be rolled.

V.

Now our tread is like the thunder,
And the earth rolls off from under.
Level and low
The sparkles fly
Behind and by,
Giving the lagging wind the lie.
To and fro
The shackle bars go.

Ha! you sons of Nature founded—
Built and shored with fleckle bones,
Know you how your feats are bounded
By the limits Nature owns?
All the turmoil you can keep
Soon must be allayed in sleep.

But approach this iron portal,
Look upon these prisoned fires,
Here behold a force immortal,
Here a strength that never tires—
Strength that shook its loins gigantic,
Ages past, before the prime,
Gored the globe in lusty antic,
Ere the coming in of time.
Shaping now our human race,
As it shaped their dwelling place.

VI.

Touch the whistle quick and sharp,
Check the fierce propelling steam,
Starting from the shadowy warp,
In the searching signal gleam,
See the midnight stalker's back!
Whirl the bell!
Life's in danger on the track.
All is well!
Passed he is, and let our eyes,
Inward turning, moralize

Brakes were hugged about the wheels,
All the cranks a stillness kept,
Shadows on the polish slept,
And the demon under seals.
Quiet lulled the murmuring ire
Of our iron heart of fire,
Till we chafed it into toil,
Gave it blast and gave it oil.
Now we nurse a mad delight,
Dash the iron leagues behind,
Horse a wrath and drink a wind,
Run outrageous through the night,
What shall start before us now,
With defiance on its brow?
Think you, on our thunder track,
Even a king could frown us back?
Could he—were our train a State,
After ages of delay,
Plunged towards an onward fate,
Leagues of progress in a day—

Onward plunged, in all its parts,
By a million earnest hearts—
Camp and council, court and press,
By the steam of strong distress!
Kings have stood in such an hour,
In the full conceit of power;
Stood and faced a coming wrath,
Till it brushed them from the path;
Wreck and redness manifold—
Fury, and a lust to kill;
Stars and orders, robes and thrones,
Reverend and anointed bones
Crunched amid a roaring mill—
Till they saw and cried to see,
Fatal is necessity.
Powers there are in governments;
Passions, principles, events,
Break whose checks and counter-checks,
And you break a thousand necks.
More the power, the deeper need
In the eyes that check and lead.
Powers without forerunning eyes—
Blind cyclopean energies—
Roar along an aimless track,
Tear the world and go to wrack.
Powers there are, that, fed and fanned,
Burst the rein of all command.

VII.

Past the forest, past the grange,
Past the misty mountain range,
Past the ledges gleaming dank,
Past the hovel, past the tank,
Past the shaggy gorge profound,
Echoes over doubtful ground,
Kenneled in the far morass,
Baying at us as we pass,
O'er the bridge and through the tunnel,
Shoots our comet-bearing funnel
Past the village dimly lighted,
Laid away in curtailed rest,
Onward, howsoever benighted,
Burns our iron-hearted breast.

Ever thus, O noble heart,
Thou must do a noble part,
While the ways are wild and deep,
While the world is gone to sleep,
Run thy race and do thine own,
Even in darkness and alone.

VIII.

Hark! what means yon fearful humming,
Hurling on the midnight air?
'Tis—it is a vengeance coming!
Back! Reverse! bind hard the brakes there.
Light, a light!
Hard and tight!
Ruin and death!
Clang the bell,
From our iron lungs
Give the whistle breath,
With an open throat,
And a wrath beneath—
Smite the air
With a huge despair.
Vain it is—give o'er endeavor—
Yonder see the sparkles flashing,
Quick! Avaunt! avoid the crashing.
Clutch your time, or sleep forever.
Now or never!

[Western Railroad Gazette.]

PITTSBURG AND CONNELLSVILLE RAILROAD.—The stockholders of the Pittsburg and Connellsville Railroad Company, a meeting held on Monday, December 5, re-elected the old Board of Directors, composed of the following named gentlemen: Benj. H. Lotrobe, Thos. Bakewell, Jos. Pennock, John Watt, Jos. Woodwell, Chas. H. Paulson, Wm. Phillips, Alex. Miller, D. R. Davidson, Cyrus P. Markle, Benj. Deford, and William F. Murdoch, of Baltimore.

The Portland, Saco and Portsmouth Railroad has declared a dividend of three per cent, payable Dec. 12.

CENTRAL OHIO RAILROAD CO.

In the eleventh annual report the President thus speaks, of the Receivership.

On the first day of May last, your Road and other assets appurtenant thereto, were, by order of the Circuit Court of the United States for the Southern District of Ohio, placed in the hands of a Receiver.

The suit in which such appointment was made, was instituted by Geo. S. Coe, Trustee for the first and second mortgage bondholders.

The necessity for such proceedings is to be regretted, but the total inability of the Company to meet all its obligations, and the apparent determination of certain parties, controlling a portion of the insecure indebtedness of the Company, to compel the payment of such indebtedness, regardless of the rights and interests of others, rendered resistance to such proceedings not only fruitless, but, under all the circumstances hardly desirable.

GENERAL REMARKS.

In the aggregate, there has been a very considerable increase in the business done, without, however, a corresponding increase in receipts. The number of through passengers during the year 1858-59 was 36,033, being 3,612 in excess of last year. Of local passengers there were carried 141,012, an excess over last year of 18,311. The earnings for freight transported during the year were \$318,633 11, an increase over those of the preceding year of \$57,597 61. Aggregate increase from passengers and freight, \$32,426 22. During the year, 194,955 tons have been transported over the road—an excess over the amount transported for the previous year of 41,452 tons.

There is doubt, with a view to the immediate results only, it would have been better to have declined a large portion of this business, and to have reduced the organization and service upon the Road to a point equal to its local wants and such business as might come to it at compensating rates; but a road, located as ours is, being a connecting link between other great thoroughfares, must, if it expects to maintain its position, and to withdraw any inducements from those thoroughfares to seek other outlets, share with them their burdens, as well as enjoy their business when prosperous.

Trains, both freight and passenger, have been run with great regularity and almost entire freedom from accident. Of the 179,045 passengers carried during the year, not one is known to have been injured.

The road-bed has been materially improved.

The Company's Independent Telegraph line has been completed at a cost of three thousand dollars, and is now in successful operation.

An analysis of the tables appended to their report affords some interesting results, some of which may be presented at another time.

The prospect for the completion of the Chartiers Valley Road, giving the Central Ohio a direct Pittsburg and Philadelphia connection, is not mentioned in the report, as the recent events, which make that completion pretty certain, had not transpired at the date of the annual meeting.

Arrangements are making at Chicago to send freights directly through to Boston, from what city, by the Michigan Central and New York Central Roads, with but a single change of cars, which will be made at Troy.

A NEW ROAD EASTWARD FROM ST. LOUIS.—The charter granted at the last session of the Illinois Legislature to Ex-Governor Casey and others, from a Railroad from East St. Louis (Bloody Island) to Carmi, Illinois, has not been availed until within the last month. The line has been surveyed running through Belleville, Mascoutah, Nashville and Ashley, on the Illinois Central Road. The Belleville Democrat is our authority for stating that within a few days arrangements have been made with a strong Company to build the road immediately. This Company wish to consult the interest of the different towns along this road, and to ascertain whether it is the wish of the citizens so take stock, and thereby secure any control of the road. The road will be built by a company with or without the aid of people along the line.

MR. THOMSON ON THE RAILROAD ROUTES TO THE PACIFIC.

Mr. J. Edgar Thomson, President of the Pennsylvania Railroad, has written a letter to the Southern Pacific Railroad Company, in which he says:

The extension of your line, it seems to me, affords the most practicable, if not the only route over which a railway can be constructed between the Eastern States and California, that will meet all the requirements for a great national highway between the Atlantic and Pacific Oceans, within the territory of the United States. Such a work has become public necessity, and must be commenced at an early date. The stake involved is too important to sanction its commencement upon any basis that will not secure its uninterrupted progress.

In this connection we copy the following from the Louisville Journal.

There was an enthusiastic and large meeting of stockholders, which, on completing its business, adjourned yesterday, after two days session. A year ago, when a similar convocation assembled in our city, there was a feeling of gloom and despondency to which the cheering indications of yesterday were a gratifying contrast. The stockholders advanced a loan, and surrendered half their investments, in the last hope to save something from the general wreck, as it appeared; now, when a call was made upon them for funds to comply with the conditions upon which J. Edgar Thomson agreed to accept the Presidency, \$50,000 were subscribed on the spot, and there is not the least doubt, in our opinion, that \$100,000 will be added to that sum by our citizens to-day, and the \$150,000, with the \$100,000 raised in Texas, makes up the quarter million for which Mr. Thomson stipulated. Thus, then, all three of the conditions are fulfilled, the debts of the company are all liquidated; the State of Texas has withdrawn all litigation affecting the preservation of the charter, and \$250,000 have been raised for a commencement of working capital. Mr. Thomson will, therefore, soon assume the position of President, of the company, and will bring to the discharge of his duties great experience in railroad matters, a character for caution of which few capitalists know the full value, and an enthusiastic ambition to carry to completion the greatest railroad enterprise which was ever undertaken. We know from the private correspondence between Mr. Thomson and Dr. Fowlkes that he feels perfectly confident of being able to connect the Atlantic and Pacific Oceans by a railroad communication in ten years, and he will make the attempt to do it in eight. He is sanguine of success. He desired only to keep

the company free from debt and litigation, but cash subscription of 250,000 was suggested by Dr. Fowlkes and accepted by Mr. Thomson. The sagacity of Dr. F. is strongly exemplified in this.

LOGANSPORT, PEORIA AND BURLINGTON RAILROAD.—But five miles of track remain to be laid on the Logansport, Peoria and Burlington Road between Logansport and Monticello. The Illinois portion of the work is about completed. Over one hundred miles of track have been laid by the Illinois Company since July last. When ready for operating, this line will immediately command a heavy business. Tapping Southern Iowa at Oquaka and Burlington, it will draw freight and travel from all points on the Upper Mississippi between Davenport and the Nauvoo Rapids. At Burlington it makes connection with the Burlington and Missouri River Railroad, which is completed for over one hundred miles, and is to be extended to Council Bluffs. By the Galesburg connection it meets, at Quincy, the Great Western Railroad from Hannibal to St. Joseph.

The managers of the Cleveland, Painesville and Ashtabula Railroad—Cleveland and Erie—have declared a semi-annual dividend of five per cent, payable in cash, and an extra dividend of five per cent, payable in scrip.

The receipts of the Erie Railroad for the first seven days of Dec., were \$117,000.

MONETARY AND COMMERCIAL.

During the week past money has been closer than at any time during the present close season. The last two days, however, have exhibited marked signs of improvement. There has been luck in mercantile collections, which has somewhat increased the supply of currency, and created a little better feeling. We trust that it is the indication of the return flow of the currency that has been going out from this center for the past six months, and that the "better time" a coming will soon be around. Rates remain the same as heretofore quoted, to customers 10@12 by the discount houses; but outside rates are a shade higher, being stiff at 18@24. The Commercial remarks, the County Sub Treasury is now absorbing a large sum for taxes—another restrictive agency in the Money Market, locking up, as it does, at a most inconvenient time, fully half a million of dollars. The total amount on the duplicate, payable by the 20th, is over \$900,000, nearly the total sum of which would be locked up on payment, were it not that the Treasurer divides to the various funds a liberal per centage of what is due each, in advance of the time which the law requires he should make his settlements, thus easing as far as possible the stringency necessarily consequent on the withdrawal of so large an amount of currency from circulation.

Eastern Exchange is flat, having declined to par at $\frac{1}{2}$ buying to $\frac{1}{2}$ selling. We quote—

	BUYING.	SELLING.
New York Sight.....	par@ $\frac{1}{2}$ prem.	$\frac{1}{2}$ @— prem.
Boston.....	par@ $\frac{1}{2}$ prem.	$\frac{1}{2}$ @— prem.
Philadelphia.....	par@ $\frac{1}{2}$ prem.	$\frac{1}{2}$ @— prem.
Baltimore.....	par@ $\frac{1}{2}$ prem.	$\frac{1}{2}$ @— prem.
New Orleans.....	par.	$\frac{1}{2}$ @ prem.
American Gold.....	@—	$\frac{1}{2}$ prem.

The Bank of Royalton and the Farmers Bank of Orwell, both of Vermont, have failed.

Illinois, Wisconsin, and Iowa funds are quoted at $\frac{1}{2}$ dis.

The New York Courier and Enquirer of Tuesday says, the Banking movement for the week past shows a further inclination to expansion of Loans, upon a reduced reserve of Coin, the changes, as compared with the previous week, being as follows:

In Loans, an increase of.....	\$788,000
In Specie, a decrease of.....	296,000
In Circulation, an increase of.....	82,000
In Deposits, a decrease of.....	312,000

We are obliged to report a very dull market for Stocks at the First Board, and a general decline in prices.

ANNUAL STATEMENT OF THE CONDITION OF THE
PEOPLE'S BANK OF KENTUCKY, DECEMBER 1ST,
1859.

ASSETS.	
Notes discounted.....	\$338,563 50
Bills of Exchange.....	112,536 40
Suspended Debt.....	3,418 75
Protest Account.....	45 58
	\$354,569 23
Safe, Vault and Fixtures.....	1,200 00
Cash Means—Gold and Silver.....	83,070 48
Notes of other Banks of Kentucky.....	3,178 00
Eastern Exchange.....	29,111 46
Due from Banks and Bankers.....	21,816 47
Total.....	\$492,945 64

LIABILITIES.	
Capital Stock paid in.....	\$174,105 00
Circulation.....	283,414 00
Due Depositors.....	28,565 91
Contingent Fund.....	26,424 29
Due Banks.....	436 44
Total.....	\$402,945 64

NUMBER OF NOTES IN CIRCULATION OF EACH DENOMINATION.	
Ones.....	\$28,280 00
Twos.....	5,014 00
Threes.....	7,521 00
Fives.....	150,390 00
Tens.....	24,000 00
Twenties.....	48,040 00

Total.....	\$263,464 00
Capital Stock subscribed and not paid in.....	\$75,895 00
Profits made by the Bank, embraced in Contingent Fund. No dividends have been declared. The Bank does not hold any Real Estate.	A. G. HOBSON, Cashier.
BOWLING GREEN, KY.	

The earnings of the Michigan Central Railroad for November, were:

	1859.	1858.
Passengers.....	\$69,394 35	\$73,111 37
Freight.....	116,829 97	77,134 75
Miscellaneous.....	5,492 85	6,001 88
Total.....	\$181,617 17	\$156,248 00
Increase.....	\$25,369 16	

One very favorable feature of the traffic of this road is that of the \$11,000 gain in the last nine days, about \$6,000 was from passengers.

In November the earnings of the Toledo and Western (Wabash Valley) Road were:

Passenger.....	\$18,527 85
Freight.....	60,027 66
Miscellaneous.....	3,316 66
Total.....	\$81,872 17
November, 1858.....	63,527 00
Increase.....	\$18,345 17

The Hannibal and St. Joseph Road, for the first two weeks of November, earned \$41,982.

The Illinois Central Railroad Company's statement for November is as follows:

LAND DEPARTMENT.	
26,191.65 acres land sold since Jan. 1, for.....	\$385,906 36
1,229,835.33 acres land sold previously for.....	15,637,148 95
1,256,026.98 acres land sold for.....	\$16,023,115 31
Construction Bonds canceled.....	\$37,000
Freeland Bonds canceled.....	5,000
Bonds canceled previously.....	1,410,000
Total Bonds canceled.....	\$1,452,000 00
Cash receipts for November.....	\$54,642 24
Cash receipts since Jan. 1.....	529,219 58
	583,861 82
Total cash and bonds to Nov. 30, '59.....	\$2,035,861 82

TRAFFIC DEPARTMENT.	
Receipts for November, 1859.....	\$250,742 19
1858.....	156,437 60
Increase.....	\$94,304 59
Receipts from Jan. 1 to Nov. 30.....	\$1,933,661 58
Corresponding period of 1858.....	1,823,679 79
Increase.....	\$111,081 79

The following is a statement of the traffic receipts of the Grand Trunk Railway of Canada, for the week ending December 5, 1859:

Passengers.....	\$20,173 60
Freight.....	38,251 78
Mails and Sundries.....	2,349 56
Total.....	\$60,764 84
Corresponding week last year.....	50,110 35
Increase.....	\$10,654 49

There is a lamentable falling off in the Canal receipts in the State of New York for the present year, being less than one-half what they were in the year 1847. The more general use of steam on the Erie Canal after its entire completion will, perhaps, make the revenue again equal to what it was in 1847-1851.

The following is a comparative statement of Tolls received on all the Canals of that State during the fourth week in November, and to the first of December in the years named below:

Years.	Fourth week Nov.	Total to Dec. 1.
1847.....	\$24,655	\$3,634,850
1848.....	29,821	3,245,662
1849.....	62,487	3,258,899
1850.....	61,422	3,256,083
1851.....	16,274	3,327,760
1852.....	31,098	3,101,724
1853.....	55,854	3,188,768
1854.....	58,162	2,761,761
1855.....	40,465	2,791,353
1856.....	41,980	2,742,356
1857.....	13,979	2,432,592
1858.....	14,254	2,108,267
1859.....	28,254	1,714,212
Decrease from 1847 (highest).....		\$1,920,438
Decrease from 1857 (lowest).....		318,180

BONDS ISSUED BY CINCINNATI TO VARIOUS RAILROAD COMPANIES.—Below we give a list of the amount of bonds issued by the City of Cincinnati to various railroad companies, and the date of which they are redeemable. All of these bonds bear interest at the rate of six per cent. per annum. The amount issued to the Covington and Lexington Railroad, \$100,000, may be regarded as lost by the recent sale of the road, the city holding only a stock security, which is cut off by the transfer.

Companies.	Amount.	When Due.
Little Miami Railroad.....	\$60,000	1860
" " ".....	20,000	1865
" " ".....	100,000	1880
Hillsborough and Cincinnati.....	100,000	1880
Eaton and Hamilton.....	150,000	1881
Covington and Lexington.....	100,000	1881
Ohio and Mississippi.....	600,000	1882
Cincinnati and Marietta.....	150,000	1884
Ohio and Mississippi (in payment of wharf property).....	234,000	1884
Same Company, for same purposes.....	250,900	1890
Total.....	\$1,754,000	

The telegraphic report of earnings in November upon the Rock Island Railroad compares as follows:

1859.....	\$99,328
1258.....	68,350
Increase.....	\$30,978

The settlements last year increased the earnings \$5,000, as will be the case this season.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned
THEODORE DEHON,
no13 10 Wal ar Broadway, New York

NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith
Branch of the Cairo and Fulton Railroad Co., Van Buren, Ark., Sep. 10, '59.

SEALED PROPOSALS for the graduation of the First Division of twenty miles eastward from Van Buren, will be received at this office until **Thursday noon, December 1st, 1859.** The work is divided into twenty sections of about one mile each, and proposals for either a part, or the whole of this Division may be made; but no bids for less than one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise. Estimates of work done will be made on the first day of every alternate month, and payments made on the first day of the month following; and fifteen per cent. of all estimates will be retained until the completion of the contract. Contractors desiring other terms of payment may bid accordingly, as the above terms are not positively settled.

The Company having a large amount of the finest Lands in Western Arkansas, will give preference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications may be seen, and all desired information obtained, upon application at the Engineer's Office, in Van Buren.

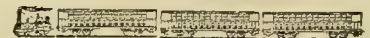
JESSE TURNER, President.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
No. 67 West 6th St. bet. Walnut & Vine
CINCINNATI O

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANAMA OR SANDOVAL

FOR

Decatur, Springfield,
Bloomington, Peoria,
Burlington, Quincy,
La Salle, Rock Island,
Dixon, Galena,
Prairie du Chien, St. Paul, and
St. Anthony.
And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANAMA for all the above points. Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R., at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via

PANAMA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all

TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,
Gen'l Southern Agent, Cincinnati.

W. P. JOHNSON,
Gen'l Passenger Agent, Chicago.

Winter Arrangement, 1859-'60.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the

West, South-West and North-West.

TWO TRAINS

Leave Wheeling daily at 12:35 P. M., and 10:10 P. M.

One Train leaves Parkersburg daily at 9:20 P. M.

Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.

Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2.

Time as quick and Fare as low as by any other ROUTE.

Inquire for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

E. F. FULLER,
General Western Agent.

L. M. COLE,
General Ticket Agent.

W. P. SMITH, Master Transportation.

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circular which can be had on application.

Unequaled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the retort is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry		
wet gas holder, holding 300 cubic feet,.....	\$300 00	
do do do 350 " " " " " " " " " "	335 00	
do do do 400 " " " " " " " " " "	375 00	
do do do 500 " " " " " " " " " "	450 00	
do do do 600 " " " " " " " " " "	525 00	
do do do 700 " " " " " " " " " "	600 00	

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, as now in operation in several States, apply to

R. T. COVERDALE,

167 Walnut Street, Cincinnati, Ohio, who has the exclusive right to manufacture and sell in the State of Ohio.
Feb. 24th, 1859.

APPLEGATE & CO.,
Booksellers, Publishers, Stationers & Blank Book Manufacturers,
43 Main St. Cincinnati, O.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Booksellers, Country merchants, and others to extensive stock of School, Classical, Theological, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the leading publishers, as well as the principal manufacturers of Paper and Stationery, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

BOOKSELLERS,

Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, Envelope, Manilla, and Tea wrap-boards, Envelopes, Gold & steel Pens, Penholders, Copying Books, Ink and surses, Sealing Sticks, Mucilage, Book rests, Bill and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files; Date Calendars, together with all other articles used in the counting-house.

Stationers,

To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly paged, including all sizes, from the small memorandum book to the large Super-Royal Ledger, and variety of styles of workmanship, order of any desired, with or without printed headings, and warranted to give satisfaction in quality of paper, accuracy of ruling and durability of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

BLANK BOOK MANUFACTURERS,

We are prepared to Print and Bind books in any style desired, at rates as low as quality of work executed in this where. Our executing these branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Dray receipts, Cards, Circulars, or any other description of printing, will find that we do such jobs despatch. Orders re-

Stereotype, of any description that may be desired, can be executed by our facilities for branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Dray receipts, Cards, Circulars, or any other description of printing, will find that we do such jobs despatch. Orders re-

Publishers,

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, *Clerks' Compendium*, *Rollin's Ancient History*, *Plutarch's Lives*, *Josephus*, *Spectator*, *Chain of Sacred Wonders*, *Familiar Science*, *Webb's Monitor*, *Soden's German*, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, of narrative and adventure. Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

43 MAIN STREET, CIN.

W. HARVEY'S SAFETY JOINT For Coupling the Ends of "T" Rail PATENTED, NOV. 2, 1858.

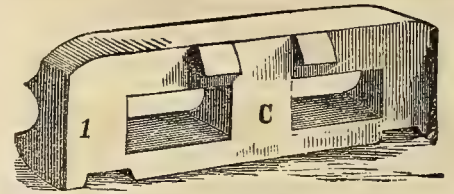


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

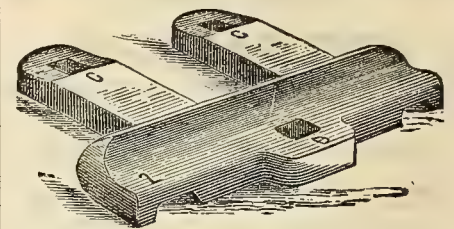
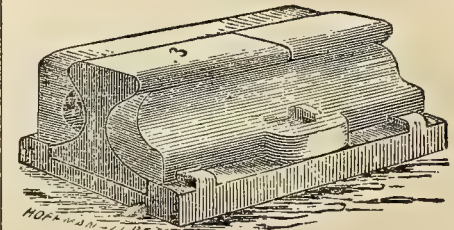


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that one part assists and takes the strain of the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly free road, thereby doing away with the breaking of rails, wheels and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear of the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
41 Jefferson street, Albany, N. Y.
ON AGENT, Cincinnati, O.

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

Sole Importers
PROSSER'S PATENT SURFACE CON-
DENSERS for high pressure steam, with sea or
other bad boiler water, gauges, 3-cutter drills, counter-
sinks, tube end cutting bars, expanders, tube scalers,
steel wire and whalebone brushes, pull lever wrenches,
tubes—plain or enameled, screwed together for Artesian
Wells, Hollow Slabs for various purposes. Steel for
Rollers. THOS. PROSSER & SON,
27 Jan. 28 Platt Street, New York.

G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

BUSH & LOBDELL, Wilmington - - - - - Delaware;

MANUFACTURERS OF

CHILLED WHEELS

AND

TIRES.

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent

FOR THEIR

CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE,

WITH OR WITHOUT AXLES.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

an2

A Book for Every Business Man! JUST PUBLISHED

—THE—

POST-OFFICE GUIDE!

For Post-Masters and Business Men.

CONTAINING

A Complete List of Post-Offices in the United States
and Territories, arranged by States and Counties; A
Complete List of all Distributing Post-Offices; Rates
of Foreign and Domestic Letter Postage; Rates of
Printed Matter, Transient and Regular; Abstract
of the Laws and Regulations of the Post-Office De-
partment, &c., &c.

COMPILED BY E. PENROSE JONES,

Late Assistant Post-Master at Cincinnati.

Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.

U. S. BLANK AGENCY, CINCINNATI POST-OFFICE,
January, 1859.

This work has been carefully compiled and corrected by
E. PENROSE JONES, Esq., late Assistant Post-Master of the
Cincinnati P. O., from the Records in this Department, and
other sources, and contains the most complete list of Post-
Offices, especially of the Western, North-Western, and
South-Western States, yet published.

MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an active pamphlet of about 100 pages.
The entire matter is kept standing in type, and as the com-
piler is promptly advised of all New Offices, Changes and
Regulations of the Department, the information is corrected
up to the last day of publication, an advantage possessed
by no other work of the kind.

Observe. That this list is arranged by States and Coun-
ties, making it especially valuable to business men. No
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are 3000 more offices in this than in any book heretofore
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Copies for \$2 00.

Address,

C. S. WILLIAMS,
194 Walnut Street,
Cincinnati, Ohio.

Mar 10.11

WHEELER & WILSON'S



SEWING MACHINES.

W. M. SUMNER & CO., cor. Fourth and Wal-
nut Streets, second floor, Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky., Columbus, O.,
Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with
important improvements, at a reduction on former prices;
and to meet the demand for a good, LOW-PRICED FAMILY
MACHINE, have introduced a new style, working upon the
same principle, and making the same stitch, though not so
highly finished, at-

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being alike on
both sides, impossible to ravel, and leaving no chain or
ridge on the under side, the economy of thread, and adap-
tability to the thickest or thinnest fabrics, have rendered this
the most successful and popular Family Sewing Machine
now made.

At our various offices we sell at New York prices, and
give instructions, free of charge, to enable purchasers to
sew ordinary seams, hem, fell, quilt, gather, bind, and
tuck, all on the same machine, and warrant it for three
years.

Send or call for a circular, containing all particu-
lars, prices, testimonials, etc. WM. SUMNER & CO.
Feb 12.

1,200 Kegs No. 1 Railroad Spikes, 5 1/2 by 9-16th
Corby, Gossin & Co.'s make, for sale very
low by TRABER & AUBERY,
7 Public Landing

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

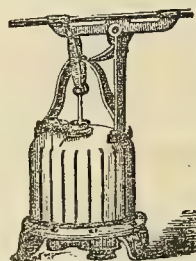
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite
the attention of RAILROAD
Companies, Manufacturer
Distillers, Miners, and the pub-
lic generally to these Pumps
as the best Pump now in use
and acknowledged by all who
have used them to be perfect-
are simple in their construc-
tion, compact, durable and not
likely to get out of order; well
adapted for Steamboats, Rail-
road Water Stations, Distill-
eries, Breweries, Furnaces,
Mines, Rolling Mills, Paper
Mills, Factories, Wells, Cis-
terns, Stationary Fire Engines, Garden Engines and, I,
all purposes where a Pump can be used. Also, for for-
cing a large body of water to a great height or distance
rapidly.

Also, McGowan's Patent Ball Valve Pump, designed
for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings
Lead, Copper and Gas Pipe furnished at the lowest mar-
ket prices.

Full and perfect satisfaction guaranteed in all cases,
when properly put up according to directions.

Orders thankfully received and promptly filled at the
shortest notice.

SILVER MEDAL. (The highest prize) awarded
for Compound Steam Pumping Engine at the late Pa-
cific Mechanics' Institute. June 18, 1855 - 1

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co.,
Pennsylvania, are prepared to execute orders for Street and
other Rails on terms favorable to parties wanting to pur-
chase Ag. 4, m. 6.

FREEDOM IRON COMPANY,

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods,

Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

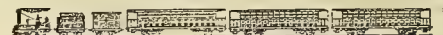
JOHN A. WRIGHT, Sup't.

This Iron is all made from best Juniata cold-blast char-
coal Pig Iron, refined with Charcoal in the old-fashioned
Forge Fire, hammered into a Bloom from which Iron is
hammered. The whole operation from ore to finished Iron
is conducted at our own Works June 9.

New Time Table

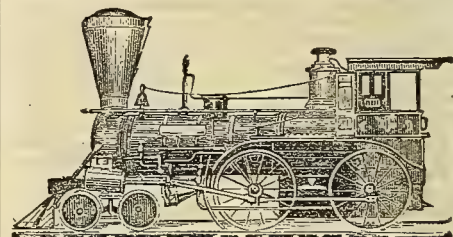
OF THE

NEW YORK CENTRAL R. R.



Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp. 7 00 A. M.	7 40 P. M.	7 00 P. M.
Mail. 9 00 A. M.	12 50 A. M.	
New York Exp. 11-15 A. M.	9 00 P. M.	9 00 P. M.
Night Exp. 5 00 P. M.	4 00 A. M.	4 00 A. M.
Utica Accom'n. 6 00 P. M.	Ar. U. 10 00 P. M.	
N. Y. Mail. 11 15 P. M.	10 0 A. M.	10 00 A. M.
Leave Buffalo.	Leave Bridge.	Ar. Albany.
New York Exp. 3 15 A. M.	5 15 A. M.	3 30 P. M.
Steamboat Exp. 8 00 A. M.	8 00 A. M.	8 00 P. M.
Mail. 11 15 P. M.		2 30 P. M.
Cleveland Exp. 6 00 P. M.	6 00 P. M.	4 40 A. M.
Cincinnati Exp. 11 00 P. M.	11 00 P. M.	8 30 A. M.
Utica Accom'n. 11 00 P. M.		10 00 A. M.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive
equal in efficiency and durability to the best Eastern
manufacture. Also, Shaping and Slotting Machines
suitable for railroad shops. Also, all kinds of heavy
forging and casting done at short notice. Also, bolts for
bridges cut with dispatch.
ap.20 MOORE & RICHARDSON.

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DIRECTED by a Board of Visitors appointed by the
State, is under the superintendence of Col. F. W.
MORGAN, a distinguished graduate of West Point
and a practical Engineer, aided by an able Faculty.

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regulated exercise.

Schools of Architecture, Engineering, Commerce,
Medicine, and Law, admit of selecting studies to suit
time means, and object of Professional preparation, both
before and after graduating.

The twelfth annual term is now open. Charges, \$102
per half-yearly session, payable in advance.

Address the Superintendent, at "Military Institute,
Franklin Springs, Ky.," or the undersigned.

P. DUDLEY,
President of the Board;

Jan 5th.

The Railroad Record.

E. D. MANSFIELD, { Editors.
T. WRIGHTSON.

CINCINNATI:
Thursday Morning, Dec. 22. 1859.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.
To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

ADVERTISEMENTS.
A square is the space occupied by ten lines of Nonpareil.
One square, single insertion, \$1 00
“ “ per month, 3 00
“ “ six months, 12 00
“ “ per annum, 20 00
“ column, single insertion, 5 00
“ “ per month, 10 00
“ “ six months, 40 00
“ “ per annum, 60 00
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“ “ per month, 25 00
“ “ six months, 110 00
“ “ per annum, 200 00
Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS.
If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.
If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

]] The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

FIRST QUARRELS AND FIRST DISCORDS IN MARRIED LIFE: To which is added a *Matrimonial Peace-Offering*; Edited by JAMES H. BURK: Cincinnati, Applegate & Co., 43 Main-st.

This is the title of a neat little volume just issued by Applegate & Co., and a volume which should be read from the first to the last line. The object of the Editor has been to illustrate how small a matter may create the first quarrel or discord among the married, and to show how easily it might have been avoided. In this we think he has fully succeeded. The book may be read by every one with both pleasure and profit, and it *should* be read by *all*, old and young,—married and single,—and especially by those who contemplate marriage. We know of no more appropriate present for sister or sweetheart for the holidays than a copy of Mr. Burk's Book.

HAMILTON AND BRANTFORD ROAD COMPANY—MEETING OF STOCKHOLDERS.—The annual meeting of the Stockholders of this Company took place at the Burlington Hotel, in this city, yesterday, the President of the company, W. J. Lovejoy, Esq., in the chair.

The only business done was the re-election of the old Board of Directors. No report of the company's affairs being submitted, we are unable to say any thing as to their position. The following are the Directors for the ensuing year—W. J. Lovejoy, President; H. Y. Yardington, Wm. Eager, A. Case, — Walker. — *Ham. Spectator*, 14th.

SETTLEMENT OF RAILROAD DEBTS.

It is becoming a very interesting, as well, as curious question, how the complicated debts of many of our roads are to be settled? Many of them are in the hands of Receivers, and we confess, that we see but one good result flowing from that operation. The Receiver having no power, without the authority of the Court to create debts, it follows that no *more* debts, unless it be necessary to preserve the very existence of the road, are made. This prevents the evil from going any further, and secures the application of the money, made by the road, to its legitimate purposes. The creditors know then, that if they are not paid, it is from no misapplication of the funds and no creation of new debts. Whatever the road can do, is for their benefit.

This, doubtless, was the great object to be attained by the appointment of Receivers. So far, it works well; but, in all other respects nothing is gained by appointing Receivers. They have not been able to increase the business of the roads, or, to put the creditors in a better condition. The main difficulty of all embarrassed roads remains the same. *Their receipts do not meet their debts.* There is here and there a case, in which the roads by a gradual increase of their business, provide to pay interest on their debts, by giving a reasonable delay. In such cases, no doubt the creditors will wait. But, what is to be done with the others? What is to be done with the great mass of debts upon the embarrassed roads? Let us take a survey of these in Ohio.

There are in Ohio, the following roads, now in the hands of Receivers.

“Central Ohio.”
“Cincinnati, Wilmington and Zanesville.”
“Marietta and Cincinnati.”
“Pittsburg, Ft. Wayne and Chicago.”
“Scioto and Hocking Valley.”

We are informed, that the holders of 2d mortgage bonds, of the Ohio and Mississippi, (which however are now but \$200,000) are about commencing suit for a foreclosure. It will not, however, result in a Receivership; for these bonds will be paid, when the holders of the construction bonds, issued instead of the 2d, find that no compromise can be made.

The debts of the five roads above mentioned, are as follows, viz:

Central Ohio.....	\$5,059,380
Cincinnati and Wilmington.....	3,260,923
Marietta and Cincinnati.....	7,773,137
Pittsburg, Ft. Wayne and Chicago.....	9,821,550
Scioto and Hocking Valley.....	6,000,000

Aggregate debts\$26,516,040

This is a large debt. The elements of these roads, on the 1st of July, 1859, were these, viz:

Length.....	141 miles.
Capital Stock.....	\$1,627,907
Number of Passengers.....	155,122
Tons of Freight.....	153,482
Gross Receipts.....	570,092
Gross Expenses.....	\$405,395
Net Receipts.....	\$164,697
No. of Locomotives.....	40
No. of Cars (in all).....	546

CINCINNATI, WILMINGTON AND ZANESVILLE.	
Length.....	131 miles.
Capital Stock.....	\$2,441,176
Number of Passengers.....	96,774
Tons of Freight.....	68,790
Gross Receipts.....	\$268,247
Gross Expenses.....	\$250,076
Net Expenses.....	\$18,171
No. of Locomotives.....	16
No. of Cars (in all).....	342

MARIETTA AND CINCINNATI.

Length.....	194 miles.
Capital Stock.....	\$3,477,704
Tons of Freight.....	77,244
Gross Receipts.....	\$374,188
Gross Expenses.....	\$328,746
Net Receipts.....	\$45,552
No. of Locomotives.....	33
No. of Cars (in all).....	549

SCIOTO AND HOCKING VALLEY.]

Length.....	56 miles.
Capital Stock.....	\$403,975
No. of Passengers.....	51,732
Gross Receipts.....	110,200
Gross Expenses.....	57,100
Net Receipts.....	53,100
No. of Locomotives.....	7
No. of Cars (in all).....	67

PITTSBURG, FT. WAYNE AND CHICAGO.

Length.....	423 mile
Capital Stock.....	\$6,247,040
Gross Receipts.....	\$1,546,359
Gross Expenses.....	967,572
Net Receipts.....	577,787

Now, in looking to a settlement of the heavy debts incurred by these roads, there are several things to be considered; 1st. the proportion of debt, 2d proportion of net profits, 3d the marshalling of debts, so as to discriminate among them. To get at the real proportion of debts on these roads, as compared with their cost, the best mode probably is to find the amount of debt *per mile*, and the relation between this and the *cost per mile*. This proportion of debt is as follows:

Marietta and Cincinnati per mile.....	\$40 667
Central Ohio per mile.....	35 882
Cincinnati and Wilmington per mile.....	24 130
Pittsburg, Ft. Wayne and Chic. per mile.....	18 780
Scioto and Hocking Valley per mile.....	11 607

Now, to get a correct view, we must compare this with the net receipts *per mile*, and the proportion between these receipts, and the interest on the debts. The net profits per mile are as follows:

Central Ohio.....	\$1,168
Cincinnati, Wilmington and Zanesville.....	140
Marietta and Cincinnati.....	234
Scioto and Hocking Valley.....	948
Pitts., Fort Wayne and Chicago.....	1,104

This shows very conclusively how these roads stand in regard to the *ability* to make a profit, but does not show, the *relation* between their profits and the interest on their debts. Now, looking to the *debt per mile*, (as above) and taking 7 per cent. as the average of interest, we have the following result.

	Profit.	Interest.
Marietta and Cincinnati.....	\$140	\$2,800
Central Ohio.....	1,168	2,500
Cin., Wilmington and Zanesville.....	234	1,650
Pittsburg, Ft. Wayne and Chicago.....	1,104	1,314
Scioto and Hocking Valley.....	948	816

The state of these roads is now evident. The *Scioto and Hocking Valley* is really *solvent*. It can readily pay its debts and yield some profit. The *Pittsburg, Ft. Wayne and Chicago*, though just put in the hands of a receiver may easily be made and kept solvent. It yields 6 per cent. (now) on its debts. The other three roads are apparently *insolvent*. The Central Ohio, however, pays $3\frac{1}{2}$ per cent. on its debts, and may be much improved.

The question remains, have all these debts to be settled.

We may be sure that 1st mortgagees will hold on, without deduction (except in regard to the probable cost of foreclosure) and buy the road, if necessary, nothing else can be expected. But there will be this deduction on the part of reasonable men. The cost of suit, the loss of interest, delay &c., are worth something, and if the 1st mortgagees can be secured at 90 per cent. with prompt interest, they will probably take it. As to the other mortgagees, there is nothing certain about them, and if they are wise they will be willing to take anything equitable they can get. The 2d mortgages never brought more than 75 per cent. net, and the holders on the principle of cost,—interest, and probable loss, should take 60 per cent. The third mortgages and income debt are worth almost nothing; if the Roads were foreclosed, they would be put at 25 per cent.

Taking the Central Ohio as an example, and we have this result.

Deduction on 1st Mortgages, 10 per cent.....	\$195,000
“ 2d Mortgages, 40 per cent.....	315,000
“ 3d Mortgages, 75 per cent.....	870,000
“ Floating debt, 75 per cent.....	1,395,000
Aggregate deduction.....	\$2,705,000
Remaining debt.....	\$2,354,000
Net profit, (as above).....	164,697

Which is..... 7 per cent.

It is plain, that with an equitable capitalization like this, the Ohio Central would become solvent, and by hard work and close management might in time pay a little to the stockholders. Why should this not be done? Someone will say the creditors will not submit to this, then they must submit to worse. Suppose the 1st mortgagees foreclose and sell, would the last class of creditors pay more than 25 per cent. of their debt to redeem it? We expect not, for it would be worth no more to them. Let some such plan be adopted for the insolvent roads.

MILWAUKEE AND HORICON RAILROAD BONDS.—The holders of the so called second mortgage bonds of the Milwaukee and Horicon Railroad, have recently made an important discovery, one which detracts very materially from the value of those securities. It is generally the case that the 2d mortgage is preceded only by the first, but in this case it is found there are intervening liens exceeding in amount either the first or second mortgages. The record stands thus:

First mortgage bonds.....	\$420,000
Mortgage to City of Michigan.....	160,000
Mortgage to Jasper Vliet, Trustee.....	274,000
Second Mortgage, so called.....	420,000

Total, on 42 miles of road.....\$1,284,000

Of the first mortgage bonds, \$7,000 have been canceled, and of the second, \$280,000, have been set apart for the payment of the mortgage of \$278,000, but inasmuch as they have not recently commanded a higher price than \$100 each, the par value of each bond being \$1000, and only a small part of the \$278,

000 lien can have been liquidated, they are virtually preceded by liens amounting to at least \$800,000.

HUDSON RIVER RAILROAD.

OFFICE OF THE HUDSON RIVER R. R. Co., }
December 10th, 1859.

The undersigned, Committee of the Directors of the Hudson River Railroad Company, in pursuance of the resolution of the Board passed on the 6th inst., viz:

“Resolved, That the President, with Messrs. Jones, Wolfe, and Miller, be a Committee to take into consideration the expediency of now initiating measures in relation to the second Mortgage Bonds of the Company, which become payable on the 16th December (1860), and to report to the Board any plan or measures which they may think proper to adopt.”

REPORT.

That they find the present indebtedness of the Company on bonds secured by mortgages to be:

Under the first mortgage, payable in 1869 and 1870.....	\$4,000,000
Under the second, payable 16th December, 1860.....	1,980,000
And under the third, payable 1st May, 1875.....	1,840,000

Total of mortgage bonds.....\$7,820,000

The Second Mortgage Bonds now call for timely attention. These were issued before the completion of the road to Albany, and were made payable in ten years, under the expectation that the development of the resources of the road would by that time enable the Company to redeem them. This expectation has not been realized; but the steady actual working of the road for the last few years, and the various economical arrangements recently adopted, and others in progress, satisfy the Committee that measures for the gradual reduction of the bonded debt of the company ought now to be initiated, and that this object can best be attained by an arrangement with the holders of the second class of bonds, for the extension of their payment to a future period, under the establishment of a sinking fund for their gradual redemption.

The Committee find that such an arrangement can be made, preserving to the holders of the Second Class all their present rights under the mortgage securing their payment, as will be seen by a copy hereto annexed, of an opinion from Daniel Lord, Esq., (under whose supervision the Mortgages of the Company were executed,) and with advantage to the holders of the Third Class of Bonds; as, if the period for the payment of the Second is not extended or deferred, no means of meeting them exist but the issue and negotiation of a like amount of the bonds payable in 1875, for which provision is made in the Third Mortgage. That course would throw a large additional amount of this class on the market, while on the other hand, the proposed extension of the Second will limit the further amount which the Company have power to issue under the Third Mortgage to \$1,153,000, in addition to \$1,002,000 reserved for exchange for the like amount of “Convertible Bonds,” now outstanding, when the holders and the Company may mutually agree on terms for such exchange.

The committee believe that no further argument is necessary to show the decided general advantage of the arrangement suggested, and that none is required as to the advantages of the establishment of a Sinking Fund for the extinguishment of the Second Mortgage Bonds—a process which, in the working of the railroads of this country, experience has rendered evident will have to be adopted very generally in meeting the bonded debts incurred for the construction of these works.

Under the terms which the Committee would submit to the parties interested in the present instance, they feel a confidence that it will be found to be the desire of a large majority of them to avail themselves of the opportunity of extending their bonds, and thus avoid the necessity of seeking new objects for their investments. This confidence is founded—on the readiness of the members of the Committee, and of many other holders of bonds whom they have consulted, to extend those which they hold—on the facts of the present current value of these bonds being a trifle only below par, and the First Class bearing a premium, and that desirable 7 per cent. securities are becoming scarce in the market—and more particularly on another fact, found upon examination of the books; that there are no less than six hundred and eleven holders of the Seconds (but a small fraction over an average of three bonds to each,) among whom are found a large number of females, executors and trustees, and one holder of one hundred thousand dollars, whose investment has remained undisturbed nearly eight years. These, as well as the other mortgage bonds of this company (besides the convenience of having interest coupons attached,) have all the advantage of being inscription securities—transferable only on the books of the company—a feature deemed by most prudent capitalists as far preferable to bonds payable to bearer.

The annual appropriation of \$20,000 to the Sinking Fund, together with accumulating annual interest on the sums paid, if commenced Dec. 16, 1860, will, on the 16th of December, 1884 (with the additional sum of \$18,055 on the 16th of June following,) extinguish this class of bonds on the latter day; but it may be expedient for the company to call in what are outstanding previous to the maturity of the Third Mortgage Bonds. Hence the provision made in Section 3 for such a contingency.

The Committee embody their views of the proper conditions and mode of the extension in the proposals herewith submitted, which they commend to the board for approval and adoption—

JAMES BOORMAN,
SAM. SLOAN,
JOHN DAVID WOLFE,
EDWARD JONES,
EDMUND H. MILLER.

The Company makes the annexed proposal: In consideration of the premises, the Hudson River Railroad Company agree on their part:

That they will pay to the Commissioners hereinafter named, on the 16th of December, 1870, the sum of \$30,000, and the same sum annually thereafter, until and including the year 1884, for the purpose of being used and applied by such Commissioners as a Sinking Fund for the payment and extinguishment, in the manner hereinafter prescribed, of the principal of the Bonds issued under the Mortgage aforesaid.

The said Company engage that the sums so paid to the said Commissioners shall be applied by them, with all convenient dispatch after receipt, to the purchase of the bonds secured by the mortgage aforesaid; and that the bonds thus purchased shall, together with the unpaid coupons be forthwith canceled by obliterating the signatures thereto; but they shall remain in possession of the Commissioners, as evidence of the obligation of the Company to pay interest on the same to the Sinking Fund, until the whole of the bonds issued under the mortgage aforesaid shall have been purchased by them. The interest thus received by the Commissioners shall be applied by

them to the purchase of the outstanding bonds under the said Mortgage, in the same manner as is above provided for the application of the annual payments of \$30,000.

It shall be the duty of the said Commissioners, at least fifteen days prior to the 16th of December in each year, to give public notice, in at least two daily papers, of the amount of the Sinking Fund they will have in hand on the said day, and to invite written tenders of bonds for sale; and they shall be bound to purchase those which may be offered on the most favorable terms; but they shall in no case purchase at a higher rate than five per cent premium on the principal (with accrued interest if any.)

In case tenders of bonds to the necessary amount are not made within the prescribed limit of price, then the Commissioners shall purchase at not exceeding the same rate, with all convenient dispatch, mortgage bonds of the Company, payable in 1875, to the amount of the Sinking Fund in their hands; and the bonds so purchased shall be appropriated by the Commissioners solely to the extinction of the second mortgage bonds; and the Company engage to pay interest thereon to the Sinking Fund, in the like manner as is provided in respect to second mortgage bonds bought by the Commissioners.

But, notwithstanding the foregoing provisions and conditions, the Company reserve to themselves the privilege and right to call in and pay off on the 16th of December, 1874, all the bonds which have been extended under these proposals and then remain outstands, by giving to the holders thereof three months previous notice of such intention, by proper public advertisement, and by paying to the holders thereof a bonus or premium of five per cent. on the amount of principal (with accrued interest, if any.) On the other hand, the company yield and grant to the holders, or any of them, the privilege and right of demanding payment for such outstanding bonds at par, (with accrued interest) on the said 16th day of December, 1874, by giving three months written notice of such intention, and on the surrender of the bonds and unpaid appurtenant coupons. And if the mutual rights and privileges under this section shall not be executed by either of the parties at the time designated, then such mutual rights and privileges shall cease.

NEW YORK CENTRAL.

The following table shows the business of the year in detail:

EARNINGS AND RECEIPTS.	
From Passengers.....	\$2,564,369
" Freight.....	3,337,138
" Other sources.....	397,330
Total.....	\$6,298,836
PAYMENTS OTHER THAN FOR CONSTRUCTION.	
Transportation expenses, viz:	
For passenger business.....	\$1,456,273
For freight business.....	1,693,155
	\$3,149,429
Interest, including interest on debt certificates held for the sinking fund.....	\$970,059
Sinking funds.....	116,733
Rent of Niagara Bridge and Canandaigua R. R.....	60,000
	1,146,813
Dividends, viz:	
No. 11. Feb., 1859, 4 per cent.....	\$959,782
No. 12. Aug., 1859, 3 per cent.....	721,060
	1,679,782

Transportation expenses for the year ending Sept. 30, 1859, 54.03 per cent. of the gross earnings, for the same period.

Net earnings for the year ending Sept 30, 1859, \$1,704,606 32, equal to 7,102 per cent. on the amount of the capital stock of the company.

The present cost of the road and equipment to date is given as follows, as compared with last year:

	By last Report.	To present time.
Graduation and Masonry.....	\$6,777,106	\$6,777,106
Bridges.....	808,067	808,067
Superstructure, including iron.....	10,156,195	10,213,195
Passengers and Freight stations, buildings and fixtures.....	1,171,000	1,174,964
Engine and car houses, machine shops, machinery and fixtures.	756,867	770,007
Land, land damages and fences.	3,993,037	4,027,244
Locomotives and fixtures, and snow ploughs.....	2,351,466	2,351,466
Passenger and baggage cars.....	851,127	851,127
Freight and other cars.....	2,054,483	2,054,483
Engineering and agencies.....	603,528	603,528
Construction account of the Rochester and Lake Ontario Railroad Co.....	150,000	150,000
Construction account of the Buffalo and Niagara Falls Railroad Company.....	658,921	658,92
Construction account of the Lewiston Railroad Co.....	400,000	400,000

Totals. cost of road and equipment..... \$30,732,517 30,840,713

The New York Times, of Monday, says:

It was understood that some change would be effected in the direction; that some leading Republicans would be admitted into the Board in the room of some of the present members, whose affinities are Democratic. It was felt by many friends of the road—among others, we presume, by Mr. Thurlow Weed—that the company would be in a better condition to meet the Republican Legislature—avowedly hostile to railroads and favorable to canals—it its Board were a less exclusively Democratic completion. The opinion of these friends, therefore, was, that some of the present directors whose presence can be spared from the Board, should be invited to withdraw their names from the ticket, and that they should be replaced by such men as Mr. Blachford, Mr. F. H. Miller of New York, and perhaps a leading Republican from the rural districts. The stockholders have not, it seems, thought fit to act upon these views. The old Board, we learn, has been unanimously re-elected.

MOBILE AND GREAT NORTHERN RAILROAD.

Remarks of Colonel Dunn at a Meeting on Thursday night, 8th inst. in Mobile.

Colonel Dunn commenced by expressing his regret that we had not a road as well as a company to speak of. When we shall have the road depends upon the good people of Mobile, and to a considerable extent upon the action of this meeting. He then gave a history of the efforts made by Montgomery and Columbus to extend their roads to the Gulf of Mexico, and after describing what had been accomplished by them towards this end, he showed that if Mobile would now energetically take hold of and build the Mobile and Great Northern Railroad, all these efforts would result to her benefit to a much greater extent than if she had carried out the original idea, in pursuance of the vote of 1853 to aid the Mobile and Girard Railroad, of constructing a road to Columbus; for the effect of that road would have been to have left Montgomery off the route, and thus would have placed her in a hostile position to Mobile.

A general route for the road had been selected. The great object had in view in making this selection was to obtain such connections with the systems of railroads now being extended toward the Gulf of Mexico from Montgomery, Selma and Columbus, that Mobile will be made their principal terminus.—These connections had to be made so as to command and obtain the tributary business,

and so that their cost of construction would be within the abilities of the company.

From the results of the preliminary surveys made during the summer, and a careful consideration of the subject, it has been determined that the general route which would best fulfill the above conditions, would be that extending from Mobile to the Alabama and Florida road, connecting with it not far above the Florida line, provided certain arrangements could be made with the Alabama and Florida and the Mobile and Girard Railroad companies. These arrangements have been made with the former company, and assurances have been received that similar terms can be effected with the latter.

This route will require a much shorter line of road to build than any other, probably not more than 65 miles to form a connection with the Alabama and Florida road. Three other points of junction with the Alabama and Florida railroad were developed by the preliminary surveys, viz: 1st. Sparta, involving the construction of a road 90 miles in length, at a cost of about \$350,000 more than the route adopted; 2d. Evergreen, requiring a road 98 miles long, at an increased cost of about \$450,000; and 3d. Greenville, demanding a road 130 miles long, at a cost of \$900,000 over the route selected. The two first connections will shorten the railroad route from Mobile to Montgomery four or five miles, and the latter about six miles over the chosen route, but all of them will ignore a union of the Mobile and Girard railroad, unless the Mobile and Great Northern road is extended eastwardly across the Alabama and Florida road at a greatly increased cost.

By the term of contract agreed upon with the Alabama and Florida Railroad Company, we have secured for Mobile, by the contemplated junction with their road, all the practical advantages of the shortest and closest connection that it is possible to make with that road. All freights and passengers from Montgomery and way stations on that road are to come to Mobile as low as they are to be transported to Pensacola. We have assurance that a similar arrangement can be made with the Mobile and Girard Railroad Company.

Had we gone to Sparta, Evergreen, Greenville or any other point on the Alabama and Florida Railroad north of the junction selected, we would necessarily have been placed in a hostile position to that road, which would have insured discrimination in favor of Pensacola and caused division of business from Mobile to Pensacola, since it is evident that all trade and traffic leaving the road at points above is a dead loss to that company. The contemplated connection will take the business over nearly the whole length of that road. Hence this arrangement will harmonize our interests with those of Montgomery, and will bind us together with bands of iron, which we will agree to lay down in the next two years, if you will furnish us with the means of so doing.

The same remarks will apply to the Mobile and Girard Railroad.

Had we gone simply to the Alabama and Florida Railroad at Sparta, Evergreen or Greenville and not beyond, we would have obtained no local business of that road, nor would we have added any business to Mobile beyond that which we now enjoy by the Alabama river, whereas by the route selected we secure the business of S. E. Alabama.

Again, the route adopted not only harmonizes Mobile and Montgomery, but it adds greatly to the value of the Mobile and Great Northern enterprise, as it will secure the completion of the Mobile and Girard Railroad, thus mak-

ing the Great Northern Road the trunk line of two important roads.

Under an act of August, 1859, the public lands on the railroad of the Mobile and Girard company to Blakely, were granted to that company, and they have been selected and secured. Now, in consideration of our uniting with their road at or near Fort Crawford, this company has agreed to divide with our company all the lands granted equally, having reference to their value and the whole length of the road from Mobile to Columbus.

In relation to the Selma connection we have, by adopting the route chosen, sacrificed nothing, but we stand in a position to make with her the *shortest* and *closest* connection possible, whenever she moves in extending her system of roads to the Gulf. The Selma connection can be constructed and the Mobile and Great Northern road can be made the trunk line of three great railroad lines, for less money on the part of the citizens of Mobile, by the plan we have adopted, than if the routes either by Sparta, Evergreen, or Greenville, had been selected. This Selma connection we regard as most important, not only in view of the vast trade and traffic that properly belongs to her system of roads, and the coal, iron, and other valuable minerals thereby developed, and the fact that it forms the most direct route between Mobile and the Northeast Atlantic cities, but we look upon it as of transcendent importance to Mobile if the people of North Alabama succeed in their favorite project of a road from Decatur to Montevallo thus opening an avenue through the State from north to south, through the richest mineral regions, and bringing us in direct connection with the heart of the great West.

There is urgent necessity of prompt action by the citizens of Mobile to build this road without delay. The recent railroad improvements in other sections have placed us off the through line of travel. We have lost the great Northern Mail.—Build our road, and I am informed by competent authority, we will have a shorter, and consequently a more expeditious railroad route than any other, and must necessarily regain our position of being on the great thoroughfare Northwest and Southwest.

Again, Pensacola and Montgomery will be connected by railroad next year, or certainly early in the year after. I now ask you what would be the loss of trade to Mobile if she forfeits this railroad connection, without counteracting it by forming our contemplated road? She would, as I am informed by a most intelligent merchant connected with the trade, annually lose at least 100,000 bales of cotton produced in the vicinity and deposited in Montgomery, which would seek an outlet to a market through Pensacola every fall when rivers would remain low, and she would also lose all the local trade tributary to the Alabama and Florida road, amounting to about 50,000 bales more. The profits arising from this cotton and the corresponding supplies required by the country producing it, amount to vast sums already. Is it not of the greatest importance that we should act promptly and efficiently prevent the division of this immense trade?

If the channels of trade are now fixed against us, it will be extremely difficult to change them. Pensacola will make a death-struggle to maintain them, for Pensacola itself is a speculation the success of which is entirely dependent on the trade created by its railroad.

The loss to Mobile of 100,000 or 150,000 bales of cotton with their correspondent supplies for a single season will be a loss of twice the amount we now ask you to subscribe to

put this road in operation. If the crop of 1861 goes to Pensacola (she cannot get the crop of 1860, as the road will not be running in time), it will involve the loss not only of more money than we now ask you to subscribe, but also a continuous loss of trade which will require the efforts of years to regain.

If we build our road promptly we have nothing to fear from Pensacola.

We have now about \$300,000 of individual stock subscriptions, and we require \$200,000 more. Give us this amount, and we will insure that a connection will be formed with the Alabama and Florida railroad, and the road will be in operation in time for the crop of 1861, and thus place Mobile independent of all rivalry. But in reference to the speedy and prompt action on the part of our citizens, I would add nothing to what has been so faithfully and earnestly urged upon you by His Honor the Chairman.

The people of Mobile have declared that the road must be built. To do it cheaply it must be built for cash, and this requires the individual stock subscription we now ask of you.

There was a discussion last spring as to the formality of the vote of the citizens of Mobile upon the question submitted to them for aiding the Mobile and Great Northern Railroad Company. Upon examination it was found that the law had not been literally complied with. This difficulty has been removed by recent legislation, which fully authorizes and empowers the corporate authorities to issue the bonds upon the vote then taken.

The preliminary surveys have been made. We have secured the services of a very competent Chief Engineer, Capt. G. Jordan, who comes to us with the highest testimonials of capacity and integrity. We have ascertained that the construction of the road from the city itself is perfectly practicable. Give us the subscription and we will put the road under contract by the 1st of January.

It is due to myself to say, that with my consent the depot shall not be located north of Stone street on any lands in which I am interested. You may rest assured that whenever I purchase any lands which it may be to the advantage of the road to own, it will be for the company, and not for myself; and further, that I will never take advantage of any information I may derive from my official position to advance my own fortunes, and no one who knows me will believe that I am capable of so doing.

THE TEXAS RAILROADS.

We compile from the official reports to the State and other sources, the following information relative to our Railroads in Texas, not before given by us. The publication of the report is made by the Comptroller.

The entire capital stock of the Houston and Texas Central Company is 972,000, of which \$372,900 is fully paid and issued. The entire indebtedness is \$948,482 21. The company has now seventy-five miles of railway completed, and equipped with five locomotives, two of which are new, two passenger cars, and upwards of eighty freight cars. Also a machine shop, depot, etc., etc.

On the fifty miles in operation from Sept. 1st, 1858, to Sept. 1st, 1859, the entire earnings were \$172,782 48. The entire expenses of operating the road, and keeping it in repair for the same time, were \$60,626 80, leaving as net earnings for that time \$112,105 58. With seventy-five miles now finished, and an early prospect of having eighty-five done, we are inclined

to believe the earnings of the current year may go up to double the above figures.

The only accident that occurred during the year was the killing of a man at Hempstead. He was intoxicated, and fell on the track. No one was to blame.

There were 55,924 bales of cotton received over the road from 1st October, 1858, to 1st September, 1859.

The capital stock of the Houston Tap and Brazoria Railway Company, is \$275,000. The amount of indebtedness is \$275,000. The company has about twenty-seven miles of road, and iron enough for thirteen miles more. It has two first class locomotives, an engine house, and shop, with a six horse power stationary engine, one passenger car, and twenty-five freight cars. This road is not yet in operation far enough to reach hardly a fraction of its anticipated business, and in consequence the earnings are quite limited in comparison to those of other roads.

But one accident has happened during the year, which was running over the arm of a man who was lying asleep near the track, having taken too much whisky. He was lying so that the engineer could not see him until too late to stop the train.

The affairs of this company have been placed in an unfortunate condition by their failure to secure the State loan, on the faith of which their iron was purchased. It is presumed that if the Supreme Court does not reverse the action of the lower Court, before which a mandamus was sued for the loan, the legislature will grant such relief as will restore credit to the Company.

The capital stock of the Indianola Railroad Company is \$100,000, which it has the right to increase to \$500,000. It has seven miles of grade only, and no completed road. Its entire expenses up to 1st July, were \$7341 25. It owes no debts, and appears to collect its stock by instalments, so as to keep money ahead of the expense account. The work is still progressing. Its entire length is to be 15½ miles, forming a junction with the San Antonio and Mexican Gulf Railway.

The paid up capital stock of the Galveston, Houston and Henderson Company, as we understand the report, is \$572,500. The total indebtedness of the Company is \$2,369,024 53.

The road has not yet been thrown open to traffic and travel, although it has earned nearly seven thousand dollars in transporting railroad iron, lumber, etc. It has 43 miles of completed road, and will shortly have about 50 miles. It is equipped with two locomotive, one passenger and fourteen freight cars.

The money for building this road, has been mainly obtained in Europe, and its apparent cost is quite large. Undoubtedly, if its construction is continued, its affairs will be managed by citizens of Texas more than heretofore and the cost of transportation will be greatly reduced.

The Memphis, El Paso and Pacific road has its capital stock fixed at \$1,200,000, although but \$47,321 17 has been paid in. It has about thirty-five miles graded, but no completed road. Its total debt is \$14,583 33. It is being built under one of the most favorable charters ever granted by the State. Its affairs are managed economically, and it will, when in operation, be a very profitable nature.

The Buffalo Bayou, Brazos and Colorado Company has a capital stock of 3,801 shares, a considerable portion of them being for lands of no great avail as yet to the company. The total amount of cash capital invested is \$154,470. Its total indebtedness is \$744,375 64. The company has seventy-four miles graded,

and 65 completed, with the iron to complete five miles more. It has two engine houses, one machine shop, one blacksmith's and one carpenter's shop. They have five locomotives, two of which are new; also one first class and two second class passenger cars, and thirty-nine freight cars. There have been two accidents to life or limb during the year, both occasioned by carelessness of the parties, and both in connection with hand cars.

This Company have not yet reached the point from which the bulk of their business is anticipated, and consequently their receipts are not large, the whole amount of the past year being about seventy thousand dollars. We feel satisfied that when their road reaches Columbus, so as to tap the country west of the Colorado, the earnings of the company will run up to five or six times the amount for last year.

The amount of cotton transported by the road was 27,245 bales.

The road has been built at a low cost, but is a good and substantial road. The management of the road is under the superintendence of Maj. John A. Williams, and he has proved himself an excellent manager.

These are all the companies that have made reports this year. There are several other important and active companies to which we will briefly refer.

The Southern Pacific Railway has a capital stock variously estimated. It has been badly managed heretofore, and large sums squandered. But a recent change in the managers of the company has given good hope that it will improve. It has 27½ miles of road, 1 locomotive and a few freight cars.

The San Antonio and Mexican Gulf Road has lately been sold out, and its charter bought so as to put it on a basis of going ahead again. It has five miles of road completed, twenty miles graded, one locomotive, and a few freight cars. The company have lately effected a purchase of iron enough to complete the first section of twenty-five miles.

The New Orleans and Texas Road has now five miles of completed road, one locomotive and a train of construction cars. The affairs of the road have been well managed, and a purchase of ten thousand tons of iron for it has been lately effected. This is on many accounts the most important road in the State.

The Eastern Texas Road, having to some extent forfeited its rights, a company has gone to work to build the road. They have done a considerable grading, and it is presumed the charter will be restored by the present legislature.

The W. C. R. Company has eleven miles of completed road, a new locomotive, a passenger car, several freight cars, etc., and is in good hands. It will require a bridge across the Brazos before it can be successfully operated, though it will be put in operation shortly without that. This is an important road, but twenty miles in length, running into the heart of a rich county, and pointing to the capital of the State, as does also the B. B. B. & C. Road.

The above embraces all the active companies in the State. They have now about 270 miles of completed road, which we trust they will increase at least one hundred miles a year.

TOLEDO, December 10.

In the Smith and Dissendorf case vs. the M. S. & N. I. R., for damages arising out of the construction of depot, bridges, &c., a verdict for plaintiffs for \$11,182 was rendered yesterday.

RAILWAY ACROSS THE BLUE RIDGE AT ROCK FISH GAP IN VA.

BY CHAS. ELLAT, JR

The Mountain Top Track, which passes over the Blue Mountain in Virginia, is probably, in many particulars, the most remarkable Railroad now in use, and, demonstrating as it does fully and practically the ability of the locomotive engine to traverse lofty mountains, and to introduce the benefits of the Railroad system into regions which have hitherto very generally considered inaccessible, the writer deems this road, constructed under his direction in opposition to considerable professional and official resistance, now that its performance has vindicated the soundness of his opinion, deserving a brief description.

It was considered throughout the world a great triumph when France, under the First Consul, had opened a road across the Alps, along which the artillery of Napoleon might be dragged by horses into Italy.

The Mountain Top Track, which is scarcely known out of the State of Virginia, proves, by its daily achievements that the Alps themselves may now be surmounted with tunneling by the modern locomotive with its train.

In fact, engines daily running on this road, and drawing after them regular trains of forty or fifty tons of freight and passengers, up grades rising at the rate of 296 feet per mile, and swinging their trains of eight wheel cars around curves of less than 300 feet radii, are capable of carrying the artillery and supplies of an army up the steepest slopes of the present road over the Simplon, and offering facilities to an invader that would have been deemed impossible a very short time ago.

A brief account of this road is presented for the purpose of directing attention to one or two points which the writer conceives to be of much practical importance, and still greatly neglected in Railroad construction.

We should not regard mountainous regions as necessarily excluded from participation in all the comforts and conveniences due to the Railroad, because they can only be reached by lines of very steep grade or very abrupt curvature. The American locomotive can penetrate into the most retired valleys of Switzerland, and bring forth the products of their industry. Wherever men can go to cultivate the earth with profit, there the locomotive can follow to take away the produce of their toil.

Companies are frequently deterred from prosecuting works which present serious physical obstacles, because they are unable to provide the means to overcome the difficulties in the precise modes set down in their plans. But, by departing temporarily, at difficult points, from their ultimate designs, they can always evade these impediments at small cost, whether they consist of lofty mountains which must finally be tunneled, or of deep ravines which must be bridged over or filled up. Steep grades and curves of short radii will serve to carry the track over the opposing difficulties and often enable the road to produce a revenue which will permit the ultimate, and sometimes the speedy perfection of the plan.

The are now, and always, many Railroads languishing for want of means to complete certain insulated heavy works, which might be easily evaded for a temporary purpose by grades and short curves, that would delay the trains but a few minutes, and add a mere trifle to the aggregate cost of transportation, and yet permit the Company to prolong its line, and work it advantageously until prepared with means to execute, and trade sufficient to justify, the cost of the permanent arrangement proposed.

It will be found that the mere interest on the cost of the permanent work that may be temporarily evaded, will alone be sufficient to pay for the construction of the temporary substitute; and often, too, that the substitute would serve to develop a business of which the growth would have been much retarded had the completion of the permanent work been waited for.

Cases frequently occur, also where the facilities offered for the construction of the heavy work, by permitting the locomotive to go forward on a temporary track, would greatly reduce the aggregate cost and accelerate the completion of the enterprise.

These general views were fully and practically sustained by Mr. Latrobe, the able and distinguished engineer of the Baltimore and Ohio Railroad, when he passed his engines and trains over the mountains in anticipation of the completion of the Kingwood and Board Tree tunnels. He did not permit hills or hollows to stand between his locomotives and the Ohio River; but surmounted the difficulties and carried his work forward, and accommodated the public wants, and satisfied the impatience of his company by a temporary but adequate expedient.

The writer, in face of energetic professional opposition, has successfully applied the same system in Virginia, and thinks its application may be judiciously extended to many other works where the hopes long deferred may be speedily realized. He does not wish, however, to be understood to advocate such roads for temporary use only. On the contrary, he is convinced that there are many points where roads of very high grades—grades of 200 or in extreme cases, more than 300 feet per mile—may be justifiably introduced for permanent use.

OBJECT OF THE MOUNTAIN TOP TRACK.

This track across the Blue Ridge was constructed by the Virginia Central Railroad Company for a temporary purpose. It forms a part of the great line in course of construction through Central Virginia, from Richmond to the Ohio, at the mouth of the Big Sandy River.

The length of the entire route will be 430 miles; of which the Central Railroad Company controls 206 miles, extending from tide water at Richmond to the town of Covington on Jackson's River, and near the eastern base of the Alleghany Mountains.

Of the 206 miles controlled by the Central Company, the State of Virginia, for reasons to which it is unnecessary here to allude, undertook the construction of the 17 miles embracing the passage of the Blue Ridge, and the tunnel which had been decided should be formed through that mountain.

For other reasons, which it is also unnecessary here to state, the progress of the tunnel and other work which the Commonwealth had assumed, was not as rapid as had been expected, and as the interests of the Central Company demanded. That Company had completed its own road from Richmond, 107 miles, up to the assumed base of the Blue Ridge, where the State's road commenced, and were also preparing for the rapid extension of their line westwardly beyond the mountain, leaving the gap which was under the control of the Commonwealth to be overcome by stages and teams.

Such was the condition of things when, in April, 1853, the writer was appointed Chief Engineer of the Central Railroad Company. An examination of the condition of the work which had been put under his professional charge, and that of the State, which was essential both to the continuity and success of the

other, satisfied his judgment that the prosperity of the entire interest involved required that the Blue Mountain should be crossed by the cars immediately with a tunnel or without a tunnel.

The work on the tunnel, including the preparatory surveys, had then been in progress over four years, and it was very obvious that nearly or quite three years more would be required, supposing the same rate of progress to be continued for its completion. He so reported to the Directory, at the first meeting after his appointment, and advised them to authorize him to construct a temporary Railroad across the mountain, to be worked by locomotive power, and to commence the undertaking forthwith.

The suggestion was approved. A force was collected as expeditiously as possible, and the surveys were made and the general plans prepared before the contractors reached the ground with their men.

The construction was commenced at a period when there was a most unusual demand for labor, and it was extremely difficult to procure an adequate supply.

The mountain itself could furnish but little of anything needed. Large quantities of lumber were required to form trestles by which to bridge the six deep ravines indented in the slope of the mountain. But timber was scarce and difficult to procure. The material to be excavated was stubborn, the greater portion being composed of Rock. The time required to complete the road and bring it into use was consequently prolonged.

From the first breaking ground until the engines crossed the summit, was seven months.

DESCRIPTION OF THE ROAD.

The Mountain Top Track crosses the summit of the Blue Ridge at Rock Fish Gap, where the elevation of the mountain is 1,885 feet above tide.—The crest of the ridge is very narrow, and is passed on a curve of 300 feet radius.

There is barely room for an engine with an ordinary train to stand on the summit, before the road slopes off, descending both towards the east and west, to the valleys on either side of the ridge.

WESTERN SIDE.

The length of descent on the western side, from the summit to what is here assumed to be the foot of the mountain, is 10,650 feet, or 2 2-10 miles.

The track descends in distance, on the west side, 450 feet—or, at the average of one foot in 23 2-3 feet.

The average grade on the western slope is, therefore, 223 1-10 feet per mile.

The maximum grade on the western slope is, 5 3-10 feet in 100, or 279 84-100 feet per mile.

On both sides of the mountain the ruling curves are described with a radius of 300 feet, on which the grade is 237 6-10 feet per mile.

The excess of the maximum over the average grade is occasioned by the attempt to compensate, in the distribution of the necessary ascent, for the effect of curvature. There was no experience to guide the writer, in the arithmetical determination of the influence of such curvature as it was necessary to introduce upon this road, and the proper diminution of the slope required on the curves to compensate for the increased traction which would there be due to the curves. On this point professional information is still very deficient, even for curves of ordinary radii, traversed by engines of common construction propelled at the

usual velocities of freight or passenger trains. For such an anomalous line as the writer was about to construct, there was absolutely no guide; and his allowance was therefore almost entirely conjectural.

When the road was first opened, it speedily appeared that the difference of 43 feet on the western side, and 58 feet on the eastern side, between the grades on curves of 300 feet radii and those on straight lines, was not sufficient to compensate for the increased traction due to such curvature. The velocity, with a constant supply of steam, was promptly retarded on passing from a straight line to a curve, and promptly accelerated again on passing from the curve to the straight line.

But, after a little experience in the working of the road, it was found advisable to supply a small amount of grease to the flange of the engine by means of a sponge, saturated with oil, which when need, is kept in contact with the wheel by a spring. Since the use of the oil was introduced the difficulty of turning the curves has been so far diminished that it is no longer possible to determine whether grades of 237 6-10 feet per mile on curves of 300 feet radius, or grades of 296 feet per mile on straight lines, are traversed most rapidly by the engine.

EASTERN SIDE.

But the more difficult portion of the work was on the eastern side of the mountain, where the ascent was greater, and the slope, in order to reach a certain level, which became a necessary condition of the problem of location, was required to be greater.

The length of the line of descent from the summit to the foot of the grade, is 12,500 feet, or 2 37 100 miles.

The road descends in this distance 610 feet, or at the average rate of one foot in 20 1-2 feet.

The average grade on the eastern slope is, therefore, 257 4-10 feet per mile.

The maximum grade on the eastern slope is 5 6-10 feet in 100, 295 68-100 feet per mile.

This maximum grade is found in a continuous line of half a mile in length.

The shortest radius of curvature on this side of the mountain was intended to be 300 feet; but in the construction of the work a more abrupt curve was introduced at one difficult point, in order to throw the track further into the hill and keep the embankment off a face of sloping and treacherous rock. At this ravine, which is found about half way down the mountain, the radius of curvature is only 234 feet, and the grade upon the curve is 237 6-10 feet per mile.

The total length of the track from the foot of the mountain on the west side, across the summit to the foot of the mountain on the east side, is 4 39-100 miles. But, in consequence of delays which occurred in the construction of other parts of the Commonwealth's road, it became necessary to extend the track 3 1-2 miles further, running it around unfinished cuts and embankments at four different points, so that the distance actually worked by the mountain engines is about eight miles.

THE LOCOMOTIVE ENGINES USED.

This road was opened to the public in the spring of 1854, and has now in the autumn of 1856 been in constant use for a period of more than 2 1-2 years. In all that time the admirable engines relied on to perform the extraordinary duties imposed upon them in the passage of this summit, have failed but once to make their regular trips. The mountain as been covered with deep snows for weeks in succession, and the cuts have been frequently

filled for long periods many feet in depth with drifted snow; the ground has been covered with sleet and ice, and every impediment due to bad weather and inclement seasons has been encountered, and successfully surmounted in working the track.

During the last severe winter, when the travel upon all the railways of Virginia and the northern and western States was interrupted, and on many lines, for days in succession, the engines upon this mountain track, with the exception of the single day already specified, moved regularly forward and did their appointed work. In fact, during the space of 2 1-2 years that the road has been in use, they have only failed to take the mail through in this single instance, when the train was caught in a snow-drift near the summit of the mountain.

These results are due, in a great degree, certainly, to the admirable adaptation of the engines employed to the service to be performed; but they are due, also, in no small degree to the skill and energy of the superintendent in immediate charge of the track and machinery.

The locomotives mainly relied on for this severe duty were designed and constructed by the firm of M. W. Baldwin & Co. of Philadelphia.—The slight modifications introduced at the instance of the writer to adapt them better to the particular service to be performed in crossing the Blue Ridge, did not touch the working proportions or principle of the engines, the merits of which are due to the patentee, M. W. Baldwin, Esq.

These engines are mounted on six wheels, all of which are drivers, and coupled, and 42 inches diameter. The wheels are set very close, so that the distance between the extreme points of contact of the wheels and the rail, of the front and rear drivers, is 9 feet 4 inches. This closeness of the wheels, of course, greatly reduces the difficulty of turning the short curves of the road.

The diameter of the cylinders is 16 1-2 inches: and the length of the stroke 20 inches.

To increase the adhesion, and, at the same time avoid the resistance of a tender, the engine carries its tank upon the boiler, and the footboard is lengthened out and provided with suspended side boxes, where a supply of fuel may be stored. By this means the weight of wood and water, instead of abstracting from the effective power of the engine, contributes to its adhesion and consequent ability to climb the mountains.

The total weight of these engines is 55,000 pound, or 27 1-2 tons, when the boiler and tank are supplied with water, and fuel enough for a trip of eight miles is on board.

The capacity of the tank is sufficient to hold 100 cubic feet of water, and it has storage room on the top for 100 cubic feet of wood, in addition to what may be carried in the side boxes and on the footboard.

To enable the engines better to adapt themselves to the flexures of the road, the front and middle pair of drivers are held in position by wrought-iron beams, having cylindrical boxes in each end for journal bearings, which beams vibrate on spherical pins fixed in the frame of the engine on each side and resting on the centers of the beams. The object of this arrangement is to form a track, somewhat flexible, which enable the drivers more readily to traverse the curves of the road.

There were three engines constructed expressly for this track, of which two answer to the description here given. The third engine was built by Mr. Joseph R. Anderson, of Richmond, and is an excellent machine and capa-

ble of doing good service. Resting on eight wheels, and being more rigid than the others, it does not yield so easily to the very short curves of this track. It is therefore kept on hand as a reserve engine, and is frequently employed to relieve the regular engines of the road.

DUTIES AND SPEED OF THE ENGINES.—The writer has never permitted the power of the engines on this mountain road to be fully tested. The object has been to work the line regularly, economically, and, above all, safely; and these conditions are incompatible with experimental loads subjecting the machinery to severe strains. The regular daily service of each of the engines is to make four trips, of eight miles, over the mountain, drawing one eight-wheel baggage car together with two eight-wheel passenger cars in each direction.

In conveying freight, the regular train on the mountain is three of the eight-wheel house cars fully loaded, or four of them when empty or partly loaded.

These three cars, when full, weigh with their loads from 40 to 43 tons—Sometimes, though rarely, when the business has been unusually heavy, the loads have exceeded 50 tons.

With such trains the engines are stopped on the track ascending or descending, and are started again, on the steepest grades, at the discretion of the engineer.

Water, for the supply of engines, has been found difficult to obtain on the mountain; and since the road was constructed a tank has been established on the eastern slope, where the ascending stop daily on a grade of 280 feet per mile, and are there held by the brakes while the tank is being filled, and started again at the signal without any difficulty.

The ordinary speed of the engines, when loaded, is 7 1-2 miles an hour on the ascending grades, and from 5 1-2 to 6 miles an hour on the descent.

Greater speed and larger loads might doubtless be permitted with success, but the policy has been to work the track with perfect safety, to risk nothing and to obtain and hold the public confidence.

BRAKES, COUPLINGS, &c.

In recommending the use of this anomalous track for the conveyance of passengers, the writer felt severely the great responsibility of his position. No care that his judgment and foresight could provide was neglected to secure the most perfect safety to those whose lives were intrusted in the hands of the Company and its agents.

The rule was adopted that no car should be suffered to cross the mountain that did not possess a brake for every wheel, of power sufficient to clutch the wheel firmly and prevent its rotation. All fixtures by which the brakes might be acted upon by the engineer, and the power conveyed simultaneously to all the wheels through a common bar or chain, were rejected, because the giving way of this connecting bar would render all the brake which were made dependent upon it powerless.

The brakes were required to be inspected carefully at every trip by an experienced man, and to be in perfect order for service before the mountain engine could be attached to the train.

The giving way of a coupling was another source of danger to be guarded against upon such grades; for, if the brakemen on the ascending train should be neglectful, and fail to apply their brakes when a coupling bar or bolt should break, the disengaged car might be carried down the grade.

To guard against this danger, reliable

couplings were provided for all the cars; and, for further security against the possibility of such an accident, two powerful tug chains were attached as extra couplings between the locomotive and the forward car, and also between each two separate cars, which are reserved couplings coming into service only in case the regular coupling bar or its connections should part. These guard chains are always attached as soon as the mountain engines, or "climbers," as they are called, are put on.

When the track is in good condition, the brakes of only two of the cars possesses sufficient power to control and regulate the movement of the train that is to say, they will hold back the two cars and the engine. When there are three or more cars in the train, the brakes on the course command the train so much the more easily.

But the safety of the train is not dependent on the brakes of the cars.—There is also a valve or air cock in the steam chest, under the control of the engineer. This air cock forms an independent brake, exclusively at the command of the engineer, and which can always be applied when the engine itself is in working order. The action of this power may be made ever so gradual, either slightly relieving the duty of the brakes on the cars, or bringing in to play the entire power of the engine.

The train is thus held in complete command. Yet no precaution is neglected to have all parts of the machinery always in effective condition—brakes, each and all, in perfect order, every man at his post, and a competent and vigilant superintendent over them to enforce discipline and command the trains.

A supply of sand is not neglected; for, though the brakes completely control the train in ordinary weather, yet, when the cold is intense, and the track, wheels and brakes are all covered with snow frozen in to hard ice they will not hold. Then, as usual, sand is applied in front of the forward drivers or in front of the middle drivers, as is under the circumstances, most expedient; and the friction may be increased to whatever amount is necessary for the safety of the train.

With the passenger trains, there is a man at the brake on every platform who, never leaves his post while on the mountain, whether the train be ascending or descending. For the freight trains, four brakemen are required to attend to the brakes of three cars, or five brakemen to those of four cars.

Such tracks as this over the Blue Ridge are very dangerous under negligent or unskillful management. But with care to observe the rules prescribed, and to keep within the authorized loads and speed, they are quite as safe if they are not safer than ordinary railways worked with ordinary care.

CURRENT EXPENSES OF THIS TRACK.

The current expenses of maintaining and working this track are scarcely as great as might be expected from it anomalous and difficult character.

The ordinary consumption of fuel by one of the mountain engines, ascending the eastern slope of the mountain, from the foot of Robinson's Hollow to the summit—a distance of 2 62-100 miles—in which an elevation of 660 feet is overcome, and many feet of 300 feet radius are turned, is 42 cubic feet or very nearly one-third of a cord. The total weight of the engine and train or mass moved, is 70 tons.

The cost of fuel is there \$2 00 a cord.

The fuel used in traversing the whole length of the track, from the Greenwood Station to the western base of the mountain, a distance of 8 miles, including both the ascent and descent

of the mountain, is two thirds of a cord, costing \$1 33, exclusive of the cost of firing up.

The total cost of working the two engines when making two round trips each per diem, is as follows:

Two Engineers, at \$75 each per month.....	\$150 00
Six Brakemen, at \$20 each per month.....	120 00
Two Brakemen, at \$25 each per month.....	50 00
Two Firemen, at \$25 each per month.....	50 00
Two Firemen, at \$17 50 per month.....	35 00
One Machinist, at \$75 per month.....	75 00

Wages of engine and train hands, per month.....	\$480 00
Fuel, oil, etc., for two engines per month, when making each four trips a day.....	350 00
	\$830 00

Annual locomotive expenses, \$9,960.

MAINTENANCE OF THE ROAD.

Salary of Superintendent, per annum.....	\$1,200 00
Two Section Masters, each \$400.....	800 00
Twelve Laborers (negroes) at \$150 per annum.....	1,800 00
One laborer at Wood station.....	150 00
Two Watchmen at trestles, \$240.....	480 00
One Night Watch at terminus.....	365 00

Annual Cost of Superintendence and maintenance.....	\$4,795 00
Add Locomotive Expenses.....	9,960 00

Cost of Maintaining and Working.....	\$14,755 00
or, per mile, per annum.....	\$1,845.

To this total must be added, of course, the cost of repairing the locomotive engines and cars; and also the depreciation, properly due to this track, of the cars and engines and the track itself.

The engines, when delivered to the Company, were all exceedingly substantial, and have needed but small current repairs beyond what the machinist of the track has been able to give to them and to the cars. No separate account has been or could be kept of the other repairs of the cars—the track being worked in connection with road east and west of the mountain.

Depreciation is always a very important item of railroad charges; but, while the machinery and track are comparatively new, any estimate of that item which might be here offered would be altogether speculative—while the object of this paper is to present only ascertained and reliable facts.

The writer does not wish to close this brief description of a road which, though built for a temporary purpose only, he thinks is likely to exercise a material influence on many future works, without duly acknowledging his obligation to those gentlemen whose co-operation materially aided in the rapid progress and great success of the work.

To his principal assistant, Thos. S. Isaack, he is indebted for the skillful and accurate execution of his plan.

To C. R. Mason and Wm. S. Carter, contractors, for their great energy and obliging promptitude in providing and applying their forces wherever needed to press forward the work.

To Messrs. M. W. Baldwin & Co. of Philadelphia, for the excellent engines that work the road; and, finally,

To Geo. S. Netherland, superintendent of this track and machinery, for his prudence, carefulness and indefatigable and intelligent personal attention on the maintenance of the way and the management of the transportation across the mountain.

ALBANY AND SUSQUEHANNA RAILROAD.—The following gentlemen have been elected directors of this road: Richard Franchot, Joseph H. Ramsay, Ezra P. Prentice, Charles Court-levi, Levi Dimmick, Eliakim R. Ford, Edward Tompkins, Robert H. Pruyn, Arnold B. Watson, Lewis Northup, Jared Goodyear, John Cook, Cornelius Vosburg.

VERMONT AND CANADA RAILROAD.

The annual meeting of this company was held at Northfield, Vt., on the 17th ult. A report from the directors was presented and read. The committee appointed at the special meeting of the company in July last, to attend to its affairs in the courts of Vermont and the branch road into Burlington, reported, in substance, that the business before the court was making satisfactory progress, with prospect of a favorable termination, and they presented a copy of an act of the Legislature, just passed, in addition to an amendment of the original charter, authorizing a change of location of route for the branch, and adopting the much less expensive route through the sand bank in Burlington. The act is considered very beneficial to the company, as by this amendment of their charter, they are relieved from all obligation to construct the branch on the route prescribed by the act of last year, which route is about thirteen and a half miles in length, and if constructed with gradients not exceeding the maximum grades of the other parts of the road, would cost, as estimated, about \$600,000; or about \$300,000 if constructed as a surface road, having grades of about eighty feet to the mile, and with a pile bridge (of doubtful permanence) across the Winooski, while by the route authorized by the act just passed, the construction of about one and a quarter miles of road only will be required, and the whole expense is expected not to exceed 150,000. This change of line will also greatly benefit the Vermont Central road, by supplying to that road an outlet from Burlington, with a grade not exceeding forty or fifty feet to the mile, in place of the present line, which has a grade of about one hundred and ten feet to the mile.

J. Gregory Smith, Esq., one of the trustees of the first mortgage, Vermont Central Railroad, submitted a statement of the financial transactions of the trustees, from July 1, 1858, to October 31, 1859, from which it appears they have received during that period as follows:

Balances due the Trustees July 1, 1858.....	\$76,676 37
Old accounts in suspense same date, (since charged off).....	16,950 61
Difference between stocks of fuel and shop stock, viz: stock on hand July 1, 1859, of.....	\$135,071 92
Stock on hand October 31, 1859, of.....	121,413 06
	13,658 86
Earnings of road from July 1, 1858, to October 31, 1859.....	996,507 62
	\$1,103,793 46
And have disbursed during same period as follows:	
General expenses.....	\$697,893 23
New rails and re-rolling rails.....	112,755 34
On account of new bridge in Georgia.....	18,122 39
Vermont and Canada R. R. Co.....	17,421 04
Patent rights, Herrick Extension, land damage, etc.....	15,893 24
Liabilities of July 1, 1858.....	138,558 64
Old suspense accounts charged off as worthless.....	16,939 64
	1,017,594 11
Leaving balance as follows.....	\$86,199 35
Consisting of balances due from other roads, notes receivable, cash, etc., on hand Oct. 31st, 1859.....	\$108,282 14
Less present liabilities of Trustees.....	22,082 79
	\$86,199 35

The following named gentlemen were unanimously elected directors for the ensuing year: Edw. Mott Robinson, of New Bedford; Gardner Brewer and E. Blake of Boston; Lucius B. Peck, Montpelier, Vt.; Worthington C. Smith, of St. Albans, Vt.; J. P. Clark, of Burlington, Vt.; John Porter, Hartford, Vt.

SOUTH CAROLINA RAILROAD.

The income of this road for October, 1859, was as follows: Freight, \$114,345 35; passage, \$43,502 99; mails, \$1,250; minor sources, \$1,413 12. Compared with the same month last year we have the following results: Increase, \$12,472 74; in down passage, \$6,053 85; in up freight, \$8,845 70;—total, \$27,372 29. Decrease in down freight and minor sources, \$18,634 17; net difference in favor of October, 1859, \$8,738 12.

The receipts of cotton for October, 1859, were 58,653 bales; for October, 1848, 73,164; for the ten months, ending October 31, 1859, the receipts were 459,316; for the same period in 1858, 325,825. Difference in favor of 1858, 66,509.

The comparative statement of the receipts of other produce is as follows:

	1858.	1859.
Merchandise, bales.....	8,293	8,670
Grain, bushels.....	264,433	118,496
Flour, bbls.....	61,803	33,399
Flour, sacks.....	112,610	58,168
Naval stores, barrels.....	14,204	29,777
Live Stock, head.....	8,924	9,960

The income of the first ten months, 1859, as compared with that of the corresponding period last year, shows the following results: Increase in up passage, \$45,201 30; in down passage, \$33,342 84; in up freight, \$74,765 15; in minor sources, \$573 99. Decrease in down freight, \$87,876 06. Difference in favor of the ten months, 1859, \$66,007 22.—*Columbia Guardian*.

THE COVINGTON AND LEXINGTON RAILROAD.—THE PROPOSITION OF MR. BOWLER.—Mr. Peter Zinn, chairman of the committee appointed by Cincinnati stockholders to confer with Mr. E. B. Bowler, in regard to a retransfer of the Covington and Lexington Railway to the stockholders, communicates the result through his official organ. From an abstract of what was done, we learn that in consideration of the amount originally paid by him (Bowler) for his stock, with six per cent. interest, he would surrender the property to the stockholders. The consideration would be, in round numbers, \$2,465,000. From this may be deducted, as assumed by the party taking the road, the permanent debt as follows:

First Mortgage Bonds.....	\$400,000
Second ".....	275,000
Third ".....	130,000
Total.....	\$1,395,000

Leaving to be raised in cash, or to be paid in short time, \$1,070,000. Of this, \$100,000 would be required to pay income bonds on interest, and the remainder, \$970,000, would go directly to Mr. Bowler. The securities held by Mr. B., and which he proposes to transfer as above, are enumerated by him as follows:

First Mortgage Bonds.....	\$ 35,000
Second ".....	470,000
Income ".....	367,000
Stock.....	165,000
	\$1,137,000
Price asked.....	1,137,000
Discount.....	\$ 67,000

Mr. Bowler says that if the stockholders show a willingness and ability to accept the proposition, it can be done conditionally upon his showing vouchers, proving the correctness of his exhibit of costs. It was intimated that "cash down" would not be required for the whole amount of the balance in Mr. B.'s favor, but good securities might be substituted in part. He would require that new securities be substituted for those deposited by him under the order of court.

Mr. Bowler was asked whether, if the stockholders should unite outside parties with them in the purchase, he would object. He replied that there were strong objections to such a course, but he would consider the matter.—There the interview ended, and this, of course, terminates the negotiation.

NEW JERSEY LEGISLATIVE APPLICATIONS.—From the number and importance of the applications advertised, the coming session of the Legislature will be a long and busy one. The following is a list of the notices of application which we have seen in our exchanges; doubtless there are still others which have escaped our notice:

Railroads.—A road from Perth Amboy to the Hudson River; a road from Trenton to New Brunswick; a road from Princeton to connect with the Millstone road; to connect the Millstone road with some point on the Delaware; to extend the Central road to Jersey City; road from Mount Holly to New Brunswick; from Hoboken to Hackensack, with the privilege of extending to Paterson; from New Brunswick to some point in the Townships of Millburn, Clinton or Orange, Essex county, (to connect with the Morris and Essex); to extend Millville and Glassboro' road so as to connect with the Camden and Atlantic; a road from Glassboro' to Woodbury; for a horse railroad from Rahway to Trembly's Point; Sup. to Sussex Railroad; Supplement to Northern Railroad, to authorize Company to hold lands—not over fifty acres more than they now hold; to repeal nineteenth section of West Jersey Railroad; horse railroad from Hoboken to North Bergen; horse railroad from Jersey City to Communipaw; to authorize Jersey City to tax real estate of Jersey City Bergen Railroad Company; to authorize Raritan and Delaware Bay Plank Road Company to lay rails to be used with horse power; Sup. to Trenton Horse Railroad; Sup. to Sussex and Warren Railroad; to authorize Camden and Atlantic Railroad Company to issue Stocks and Bonds.

THE PITTSBURG, FORT WAYNE AND CHICAGO ROAD.—The New York *Tribune* of Saturday says that Mr. J. Edgar Thomson, President of the Fort Wayne and Chicago Road, was in town that day, and met a large number of the bondholders of that concern, including the parties at whose motion Mr. Edgarton was appointed Receiver. The meeting at first was a stormy one, but after explanations were made by Mr. Thomson, the parties present seemed satisfied, and there is reason to believe that measures will be adopted vacating the Receivership, and adopting substantially the scheme put forth by the managers a few days since.

WESTERN MARYLAND RAILROAD.—The annual report of the President and directors of this company, just issued, after noticing the opening of the road to Owing's Mills says:

Five miles more of the track is now being built, and when completed, which certainly will be accomplished by the middle of next month, the running of the cars will at once be extended to Reisterstown. From this point a large amount of the work is done on the line in the direction of Westminster. Eight miles of which will soon be ready for the track when it will be put down with the least possible delay.

The western division extending from Union-bridge, beyond New Windsor, is in such a state of advancement that the track laying can be commenced as soon as it is reached.

MONETARY AND COMMERCIAL.

The money operations for the past week have been reduced to the most extreme degree of closeness. Indeed for no time during the past five years, or perhaps longer, has it been so difficult to obtain money as during the past week. The question has not been so much the character of the paper offered, as it has been the utter inability to do anything, although, of course, out of the fulness of offering, bankers selected these that suited them best. We trust, however, the turning point has been reached, and that we may now look forward to a gradual improvement and a more easy tone in the money market, although but little relief can be expected until after the payments of January 4th.

Yesterday, Eastern Exchange advanced to $\frac{1}{4}$ prem. buying to $\frac{1}{2}$ prem selling. This will again put the sorting houses to work, and add materially to the difficulties already existing in keeping up the supply of currency. Quotations are:

	BUYING.	SELLING.
New York Sight.....	$\frac{1}{4}$ prem.	$\frac{1}{4}$ prem.
Philadelphia Sight.....	$\frac{1}{4}$ "	$\frac{1}{4}$ "
Boston Sight.....	$\frac{1}{4}$ "	$\frac{1}{4}$ "
Baltimore.....	$\frac{1}{4}$ @ $\frac{1}{4}$ "	$\frac{1}{4}$ "
New Orleans.....	par @	"
American Gold.....	$\frac{1}{4}$ @ $\frac{1}{4}$ "	$\frac{1}{4}$ "

We annex the third monthly report of the Receiver of the Erie Road:

NATHANIEL MERRIS, RECEIVER, IN ACCOUNT WITH THE NEW YORK AND ERIE RAILROAD COMPANY.

	Receipts.	Dr.
Oct. 31. To balance per last report.....		\$50,926
Nov. 31. To Rents collected.....	\$1,982	
To damaged, etc. goods sold.....	925	
To old railroad iron sold.....	15,614	
To dis. and currency bought.....	45	
To Northern R. R. on acct.....	831	
To Pittsburg, Ft. Wayne & Chicago R. R. Co.....	208	
To Williamsport and Elmira R. R. Co.....	312	
To La Crosse and Milwaukee R. R. Co.....	682	
To Philadelphia and Reading R. R. Co.....	691	
To old scrap iron sold.....	1,279	
To hire of cars.....	16	
To car keys loaned conductors.....	20	
To freight and passenger receipts.....	623,773	
Total.....		\$699,291
Balance on hand Nov. 30, 1859.....	\$176,736	
1859. Disbursements. Cr.		
Nov. 20. By sundry accounts for supplies, etc.....	12,431	
By interest on acceptances.....	118	
By charges on freight.....	23,979	
By railroad iron bought.....	30,296	
By payments for exp.....	256,459	
By tolls, N. I. R. R.....	2,973	
By rents paid.....	1,187	
By Long Dock Company for interest.....	9,939	
By taxes paid.....	15,277	
By sundry ticket bal.....	5,742	
By Winslow, Bush & Strong acct. judgment.....	15,000	
By telegraph right to use, etc.....	306	
By coal bought.....	439	
By sundry bills for supplies and expenses.....	78,253	
By balance on hand.....		\$522,534
Total.....		\$699,291

The item \$256,459 is in part to pay wages in arrear, but they are now all paid up.

SACRAMENTO VALLEY RAILROAD.—The following is a statement of the earnings of the Sacramento Valley R. R. during the last three years:

	1857.	1858.	1859.
Gross receipts.....	\$177,842 11	\$185,108 20	\$211,429 55
Operating exp's.....	91,944 56	82,840 46	96,343 83

Total..... \$86,797 56 \$102,267 74 \$115,076 73

From this are to be deducted payments for the ground, for depot, new track along the levee at Sacramento, and for material on hand and on shipboard not used..... 24,175 17

Net proceeds over and above expenses..... \$62,622 59

Income Account of the New York Central for the year ending September 30, 1859:

Expenses of maintaining and operating road.....	\$3,349,429 11
Coupons and interest.....	970,059 62
Dividend No. 11, Feb., 1859, 4 per cent.....	\$952,782 00
Dividend No. 22, August, 1859, 3 per cent.....	720,000 00
Contribution to Sinking Fund:	1,679,782 00

Debt certificates.....	\$114,102 77
Bonds to Buffalo and Niagara Falls R. R. Co.....	2,651 00
Rent of the Niagara Bridge and Canandaigua Railroad.....	60,000 09
Balance, Sept. 30, 1859.....	1,519,150 55

Balance, Sept. 30, 1858.....	\$7,995,175 05
Passenger receipts.....	2,566,369 71
Freight.....	3,337,148 36
Mail.....	95,765 60
Miscellaneous.....	201,565 75
Total.....	6,200,848 82
Balance, Sept. 30, 1859.....	\$7,995,175 04

General Balance Sheet, Ledger, Sept. 30, 1859.

Railroad and equipment.....	\$30,840,713 71
Cash in banks, and cash balances.....	490,163 07
Buffalo and State Line Railroad.....	557,860 00
Troy Union R. R.....	21,100 00
Hudson River Bridge.....	10,180 00
Debt certificates, etc., chargeable to Income.....	8,015,000 00
Fuel and supplies; surplus beyond \$1,000,000.....	286,806 70
Bills receivable.....	42,768 64
General Post Office Department.....	27,675 45
Real Estate (Buffalo and Niagara Falls R. R. Co.).....	32,500 00
Do. (Oliver, Lee & Co.'s Bank).....	34,826 63
Trustees Syracuse & Utica R. R. Co.....	6,680 91
Total.....	\$40,366,005 11
Capital Stock.....	\$24,000,000 00

DEBT:—

Albany and Schenectady R. R. Co.....	126,000 00
Schenectady and Troy R. R. Co.....	100,000 00
Rochester and Syracuse R. R. Co.....	65,000 00
Buffalo and Rochester R. R. Co.....	51,067 98
Roch. Lock, and Niagara Falls R. R. Co.....	295,000 00
Buffalo and Niagara Falls R. R. Co.....	42,000 00
Debt certificates.....	7,925,000 00
Bonds for convertible loan.....	3,000,000 00
" Railroad Stocks.....	770,440 00
" Real Estate.....	195,000 00
" Funding Debts of old Companies.....	1,225,000 00
Bonds to Buffalo and Niag. F. R. R. Co.....	50,000 00
Bond to Telegraph Co.....	10,000 00
Bonds, convertible, due 1876.....	182,000 00
Bonds and mortgages.....	264,033 96
Unclaimed dividends.....	5,888 94
Expenses of operating the road; paid in October.....	67,553 03
Coupons and interest; accrued to September 30.....	339,639 38
Income account; balance September 30, 1859.....	1,619,150 55
Total.....	\$40,366,005 11

Cost of Maintaining Roadway and Real Estate.....	\$1,099,433 13
Cost of Repairs of Machinery.....	533,360 00
Cost of operating the Road.....	1,716,635 98
Total.....	\$3,349,429 11

The Albany Statesman announces that the New York State Loan for \$943,100, due and payable July 1, 1860, will be retired in full, the State being in funds to pay the principal at maturity. The whole debt of the State, at the present time, according to the same authority, is as follows:

Four and a half per cent.....	\$287,700 00
Five per cent.....	11,478,127 77
Five and a half per cent.....	1,768,700 00
Six per cent.....	16,321,705 53
Total bonded debt.....	\$29,856,433 30
Comptroller's bonds.....	474,910 68
Indian annuities.....	122,694 84
Present debt.....	\$30,454,038 85

To be issued:

Redeemable July 1, 1866.....	\$800,000
" " 1872.....	800,000
" " Dec. 1, 1877.....	900,000
Total.....	2,500,000 00

Total..... \$32,954,038 85

Of the Stocks issued, the Banking Department held on the 1st of October last, \$19,562,035 93, and the Comptroller in funds for specific funds, \$1,265,296 68, making a total retired, or not on the market and available for Banking purposes, of \$20,827,332 61.

The debt already issued is redeemable as follows:

At pleasure.....	\$1,869,387 77
1864.....	1,767,393 23
1861.....	3,468,682 00
1862.....	1,800,000 00
1864.....	687,600 00
1865.....	1,957,274 76
1866.....	292,585 40
1868.....	1,942,061 05
1871.....	500,000 00

1872.....	2,250,000 00
1873.....	6,000,000 00
1874.....	6,750,000 00
1875.....	600,000 00
Total.....	\$29,856,433 30

CENTRAL OHIO RAILROAD.—H. J. Jewett, Esq., Receiver of the Central Ohio R. R., filed his report for October in the U. S. Circuit Court, last Thursday:

EXPENSES.

Transportation Department.....	\$14,829 83
Machinery Department, repairs of cars.....	4,513 94
Repairs Department, repairs of engines.....	5,691 23
Road Department.....	12,879 62
General Expenses.....	7,035 75
Total.....	\$44,950 37

EARNINGS.

From Passengers.....	\$21,888 50
" Freight.....	27,035 09
" Express.....	1,878 59
" Mail.....	2,290 60
Total.....	\$53,092 78

RECEIPTS.

The receipts for the month were.....	\$103,877 53
Consisting of amount on hand at conclusion of September report.....	\$29,205 66
Receipts from business and other sources during September.....	74,681 87
Total.....	\$103,877 53

The receipts and expenditures are classified as follows:

RECEIPTS.

Balance on hand, as per last report.....	\$29,205 66
From earnings previous to May last.....	46 25
Passenger business.....	\$29,173 27
Freight.....	42,665 31
Express.....	1,458 07
Other sources.....	1,327 97
Total.....	74,625 62
To balance on hand.....	\$30,874 62

EXPENDITURES.

Payments made for liabilities prior to May 1st, 1859.....	\$5,919 13
Payments made for liabilities in May, June, July, August and September.....	68,851 01
Payments made for liabilities in October.....	4,241 90
Balance on hand.....	30,784 62
Total.....	\$103,877 53

The following is a statement of the traffic receipts of the Great Western Railway of Canada, for the week ending 9th of December, 1859:

Passengers.....	\$15,838 81
Freight.....	16,164 50
Mails and Sundries.....	1,450 78
Total.....	\$33,454 00
Corresponding week last year.....	34,319 08
Decrease.....	\$869 08

H. SHACKEL, Auditor.

Audit Office, Hamilton.

The following is a comparison of the revenue of the Baltimore and Ohio Road for November, 1858 and 1859:

	1858.	1859.
Main Stem.....	\$320,193 46	\$375,743 73
Washington Branch.....		
November.....	35,248 35	33,240 53
N. W. Va. Railroad.....		
November.....	26,247 94	22,304 25
Total.....	\$381,689 75	\$431,288 56
Showing a net increase of \$50,407 81 in November, 1859. This is a gratifying commencement of the Company's fiscal year.		

The earnings and expenses of the Watertown and Rome Railroad for November, 1858 and 1859, were as follows:

EARNINGS.

	1858.	1859.
Passengers.....	\$12,040 20	\$12,064 56
Freight.....	28,939 01	30,123 96
Mails, etc.....	1,933 10	2,471 63
Total.....	\$42,912 31	\$44,660 15

EXPENSES.

Maintaining Road.....	\$3,268 21	\$4,183 24
Repairs of Machinery.....	1,914 94	2,119 80
Operating Road.....	8,030 69	6,269 38
Overcharges refunded.....	23 46	12 40
Total.....	\$13,176 50	\$14,684 82
Net.....	\$29,735 81	\$29,975 33

Cleveland and Mohoning Railroad Earnings and Expenses for November:

From Passengers.....	\$ 3,898 15
Freight.....	13,491 19
Coal.....	13,937 46
Mail.....	462 50
Total earnings.....	\$31,589 30
Operating Expenses.....	9,213 88
Officially reported net earnings.....	\$22,375 42

EXPORT OF GOLD FROM SAN FRANCISCO.—The exports of treasure since October 31 were as follows:

Per Golden Age, to New York...	\$1,710,579 95
Per Golden Age, to England....	11,900 00
Per Southern Cross, to Hong Kong.....	7,785 00
Per Black Warrior, to Hong Kong.....	218,000 00
Total.....	\$2,047,753 95
Exported previously this year.....	40,376,868 21
Total to date.....	\$2,494,622 14
Corresponding period of 1858.....	41,794,369 00

Excess of 1859 over 1858..... \$630,053 14

GRAND TRUNK RAILWAY OF CANADA.—Audit Office, Montreal Dec. 13, 1859.—Statement of Traffic Receipts for week ending Saturday, Dec. 12, 1859:

Local Passengers, 11,270.....	\$16,116 50
Foreign Passengers, 1,817.....	3,547 62
Emigrants, do. 116.....	315 57
Mails, Express, etc.....	2,772 46
Local Freight and Live Stock, 5,924 tons.....	22,335 80
Timber and Lumber, 606,500 feet, 740 tons.....	8,760 97
Firewood, 1,118 cords, 1,473 tons.....	902 60
Foreign Freight, etc., tons 2,730.....	15,360 37

Total... (970 miles)..... \$63,182 79

Week ending Nov. 27, 1858, (880 miles). 47,141 43

Increase..... .90 " ..\$16,048 36

Total traffic from July 1st, 1859, to date..... \$1,084,460 19

For same period last year..... 902,971 67

Mileage and Receipts of St. Thomas' Branch are not included in this return JOHN HARDMAN, Auditor.

REVENUE OF THE COMMONWEALTH OF PENNSYLVANIA.—Summary of the Receipts at the State Treasury, from the 1st day of December, 1858, to the 30th day of November, 1859, both days inclusive:

1. Lands.....	\$13,559 92
2. Auction Commissions.....	18,075 10
3. Auction Duties.....	41,981 28
4. Tax on Bank Dividends.....	262,017 34
5. Tax on Corporation Stocks.....	464,784 59
6. Tax on Real and Personal Estate.....	1,388,502 18
7. Tavern Licenses.....	185,304 22
8. Retailers' Licenses.....	213,187 69
9. Sample Licenses.....	285 00
10. Peddler's Licenses.....	1,815 87
11. Broker's Licenses.....	7,648 98
12. Theatre, Circus and Menagerie Licenses.....	5,262 50
13. Distillery and Brewery Licenses.....	8,897 55
14. Billiard Room, Bowling Saloon and Ten Pin Alley Licenses.....	1,526 63
15. Eating-House, Beer Hall and Restaurant Licenses.....	13,750 13
16. Patent Medicine Licenses.....	1,412 95
17. Pamphlet Laws.....	377 95
18. Militia Tax.....	9,593 31
19. Millers' Tax.....	4,689 02
20. Foreign Insurance Agencies.....	15,136 23
21. Tax on Writs, Wills, Deeds, etc.....	63,514 12
22. Tax on Certain Offices.....	14,036 58
23. Collateral Inheritance Tax.....	124,946 32
24. Canal Tolls.....	4,411 88
25. Sale of Turnpike Stock.....	2,286 12
26. Tax on Enrollment of Laws.....	7,090 00
27. Premiums on Charters.....	42,647 69
28. Tax on Leases.....	175,784 46
29. Interest on Loans.....	567,799 46
30. Premiums on Loans.....	41,573 87
31. Tax on Tonnage.....	47,582 68
32. Escheats.....	3,375 52
33. Dividends from Bridge Tolls.....	80 00
34. Pennsylvania Railroad Co. Bond No. 2, Redeemed.....	100,000 00
35. Sunbury and Erie Railroad Co., Excess on Sale of Canal.....	250 00
36. Accrued Interest.....	1,470 01
37. Refunded Cash.....	4,203 62
38. Annuity for Right of Way.....	20,000 00
39. Fines and Forfeitures.....	4,027 21
40. Fees of the Public Offices.....	3,938 28
41. Miscellaneous.....	329 29

\$3,826,350 14

Balance in the State Treasury, November 30th, 1858, available. \$892,028 76

Depreciated funds in the Treasury, unavailable..... 41,032 00

933,059 76

\$4,759,409 90

EXPENDITURES OF THE COMMONWEALTH OF PENNSYLVANIA.—Summary of the Payments at the State Treasury from 1st December, 1858, to the 30th day of November, 1859—both days inclusive:

1. Expenses of Government.....	\$408,697 40
2. Militia Expenses.....	3,000 00
3. Philadelphia Riots of 1844.....	19 00
4. Pennsylvania Volunteers in the late War with Mexico.....	72 10
5. Pensions and Gratuities.....	7,775 62
6. Charitable Institutions.....	196,201 68
7. Pennsylvania Colonization Society.....	1,075 00
8. Pennsylvania State Agricultural Society.....	2,000 00
9. Farmers' High School of Penn.....	9,300 00
10. Common School.....	287,790 37
11. Commissioners of Sinking Fund.....	253,634 02
12. Interest on Loans.....	1,986,147 35
13. Guaranteed Interest.....	18,517 50
14. Late Board of Canal Commissioners and Secretary.....	2,696 77
15. Damages on the Public Works and old Claims.....	10,649 54
16. Special Commissioners.....	119 00
17. Revenue Commissioners of 1857.....	120 00
18. State Library.....	4,511 80
19. Public Buildings and Grounds.....	7,734 90
20. Houses of Refuge.....	38,500 00
21. Penitentiaries.....	38,194 70
22. Escheats.....	723 70
23. Amendments to the Constitution.....	212 00
24. Geological Survey.....	5,880 00
25. Abatement of State Tax.....	52,096 55
26. Mercantile Appraisers.....	699 34
27. Counsel Fees and Commissioners.....	4,988 80
28. Nicholson Lands.....	120 78
29. Willamport and Elmira Railroad Company.....	622 52
30. Miscellaneous.....	7,679 88

\$3,879,054 81

Balance in the State Treasury, Nov. 30th, 1859, available. \$839,323 09

Depreciated Fund in the Treasury, unavailable..... 41,032 00

880,355 09

\$4,759,409 90

PHILADELPHIA, WILMINGTON AND BALTIMORE RAILROAD.—During the twelve months ending the 1st of November, the following amount of freight has been carried over the Philadelphia, Wilmington and Baltimore Railroad, exclusive with that which passed over the Delaware branch: Merchandise, 171,520 tons: coal, 5,643 do.; lime, 297,700 bushels; pig and bar iron, 6,399 tons; iron ore, 2,419 do.; live stock, 6,768 do.; lumber, 10,266 do.; barrels of flour, 152,360 do.—making the gross amount of tonnage 217,831 tons. During the same there were brought to Philadelphia from points this side of Wilmington, 765,300 gallons of milk.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned
THEODORE DEHON,
no 13 10 Wal ar Broadway, New York

NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith Branch of the Cairo and Fulton Railroad Co., Van Buren, Ark., Sep. 10, 1859.

SEALED PROPOSALS for the graduation of the First Division of twenty miles eastward from Van Buren, will be received at this office until Thursday noon, December 1st, 1859. The work is divided into twenty sections of about one mile each, and proposals for either a part, or the whole of this Division may be made; but no bids for less than one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise. Estimates of work done will be made on the first day of every alternate month, and payment is made on the first day of the month following; and fifteen per cent. of all estimates will be retained until the completion of the contract. Contractors desiring other terms of payment may bid accordingly, as the above terms are not positively settled.

The Company having a large amount of the finest Lands in Western Arkansas, will give preference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications may be seen, and all desired information obtained, upon application at the Engineer's Office, in Van Buren.

JESSE TURNER, President.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
No. 67 West 6th St. bet. Walnut & Vine

CINCINNATI O

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANA OR SANDOVAL

FOR

Decatur, Springfield, Bloomington, Peoria, Burlington, Quincy, La Salle, Rock Island, Dixon, Galena, Prairie du Chien, St. Paul, and St. Anthony, and all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANA for all the above points. Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all

TOWNS ON THE UPPER MISSISSIPPI

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,

Gen'l Southern Agent, Cincinnati.

W. P. JOHNSON,

Gen'l Passenger Agent, Chicago.

Winter Arrangement, 1859-'60.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the West, South-West and North-West.

TWO TRAINS

Leave Wheeling daily at 12:35 P. M., and 10:10 P. M.

One Train leaves Parkersburg daily at 9:20 P. M.

Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.

Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2.

Time as quick and Fare as low as by any other ROUTE.

Inquire for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

E. F. FULLER,

General Western Agent.

L. M. COLE,

General Ticket Agent.

W. P. SMITH, Master Transportation.

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circular which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the repair is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet,.....	\$300 00
do do do 350 " " " " " " " " " "	325 00
do do do 400 " " " " " " " " " "	375 00
do do do 500 " " " " " " " " " "	450 00
do do do 600 " " " " " " " " " "	525 00
do do do 700 " " " " " " " " " "	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and ear reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, as now in operation in several States, apply to

R. T. COVERDALE,

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who has the exclusive right to manufacture and sell in the State of Ohio.

Feb. 24th, 1859.

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Booksellers, Publishers, Stationers & Blank
Book Manufacturers,
43 Main St. Cincinnati, O.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Booksellers, Country merchants, and others to our extensive stock of School, Classical, Theological, Standard, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the principal publishers and importers of Paper and Stationery, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

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Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, Envelope, Manilla and Ten wrap-boards, Envelopes, Gold and Steel Pens, Penholder-racks, Copying Books, Ink and Stamps, Sealing Sticks, Mucilage, Book rests, Bill Envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files: Date Calendars, together with all other articles used in the counting-house.

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To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly paged, including all sizes, from the small memorandum book to the large Super Royal Ledger, and variety of styles workmanship. In order of any description, with or without and warranted to be in quality of ruling and durability of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

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We are prepared to Print and Bind books in any style desired, at rates as low as quality of work cut in. Our executing these branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Cards, Circulars, or other printing, will that we do such jobs despatch. Orders re-

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Publishers

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, *Clarke's Compendium*, *Rol. lin's Ancient History*, *Plutarch's Lives*, *Josephus*, *Spectator*, *Chain of Sacred Wonders*, *Familiar Science*, *Webb's Monitor*, *Soden's German*, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, Books of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

43 MAIN STREET, CIN.

W. HARVEY'S SAFETY JOINT For Coupling the Ends of "T" Rail PATENTED, NOV. 2, 1858.

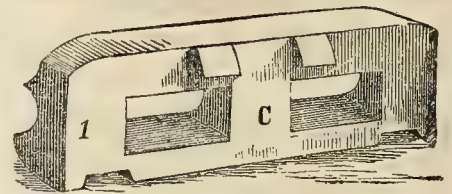


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

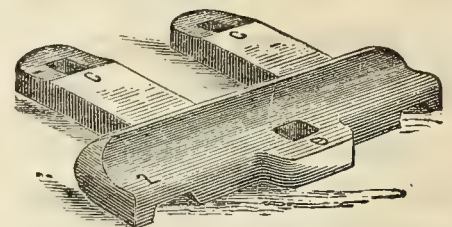
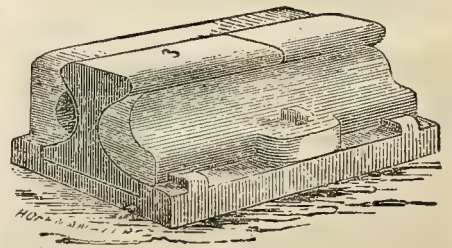


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that one part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly free road, thereby doing away with the breaking of rails, wheels, and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
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PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
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PROSSER'S PATENT SURFACE CON-
DENSERS for high pressure steam, with sea or
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Wells, Hollow Slabs for various purposes. Steel for
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MANUFACTURERS OF

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TIRES,

For R. R. Cars & Locomotive Engines,
ARE PREPARED TO

Execute Promptly Orders to any Extant
FOR THEIR

CELEBRATED WHEELS,
EITHER SINGLE OR DOUBLE PLATE,
WITH OR WITHOUT AXLES.

WHEELS FITTED
To Hammered or Rolled Axles,
In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

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JUST PUBLISHED

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POST-OFFICE GUIDE!
For Post-Masters and Business Men.

CONTAINING
A Complete List of Post-Offices in the United States
and Territories, arranged by States and Counties; A
Complete List of all Distributing Post-Offices; Rates
of Foreign and Domestic Letter Postage; Rates of
Printed Matter, Transient and Regular; Abstract
of the Laws and Regulations of the Post-Office De-
partment, &c., &c.

COMPILED BY E. PENROSE JONES,
Late Assistant Post-Master at Cincinnati.
Price Twenty-Five Cents.

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This work has been carefully compiled and corrected by
E. PENROSE JONES, Esq., late Assistant Post-Master of the
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other sources, and contains the most complete list of Post-
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W. M. SUMNER & CO., cor. Fourth and Wal-
nut Streets, second floor, Cincinnati, Ohio.

BRANCH OFFICES:

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to meet the demand for a good, LOW-PRICED FAMILY
MACHINE, have introduced a new style, working upon the
same principle, and making the same stitch, though not so
highly finished, at-

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALIKE ON
BOTH SIDES, impossible to ravel, and leaving no chain or
ridge on the under side, the economy of thread, and adap-
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the most successful and popular Family Sewing Machine
now made.

At our various offices we sell at New York prices, and
give instructions, free of charge, to enable purchasers to
sew ordinary seams, hem, fell, quilt, gather, bind, and
tuck, all on the same machine, and warrant it for three
years.

If Send or call for a circular, containing all particu-
lars, prices, testimonials, etc.
Feb12.

WM. SUMNER & CO.

1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th
Corby, Gossin & Co.'s make, for sale very
low by
TRABER & AUBERY,
7 Public Landing

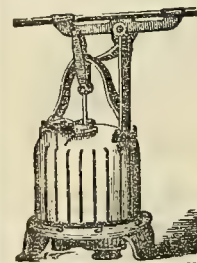
GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND
Compound Steam Pumping Engine,



WOULD respectfully invite
the attention of RAILROAD
Companies, Manufacturer
Distillers, Miners, and the pub-
lic generally to these Pumps:
as the best Pump now in use
and acknowledged by all who
have used them to be perfect-
are simple in their construc-
tion, compact, durable and not
likely to get out of order; well
adapted for Steamboats, Rail-
road Water Stations, Distill-
eries, Breweries, Furnaces,
Mills, Factories, Wells, Cla-
ses, Stationary Fire Engines, Garden Engines and for
all purposes where a Pump can be used. Also, for forc-
ing a large body of water to a great height or distance
rapidly.

Also, McGowan's Patent Ball Valve Pump, designed
for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings
Lead, Copper and Gas Pipe furnished at the west mar-
ket prices.

Full and perfect satisfaction guaranteed in all cases,
when properly put up according to directions.

Orders thankfully received and promptly filled at the
shortest notice.

SILVER MEDAL. (The highest prize) awarded
the pump and Steam Pumping Engine at the late Pa-
cific Mechanics' Institute June 18, 1855 —1

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co.,
Pennsylvania, are prepared to execute orders for Street and
other Rails on terms favorable to parties wanting to pur-
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FREEDOM IRON COMPANY,

MANUFACTURERS OF

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Engine and Car Axles, Pump and Piston Rods,

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And all Forgings for Railroad Machinery.

Lewistown, Milfin Co., Penn.

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This Iron is all made from best Juniata cold-blast char-
coal Pig Iron, refined with Charcoal in the old-fashioned
Forge Fire, hammered into a Bloom from which Iron is
hammered. The whole operation from ore to finished Iron
is conducted at our own Works
June 9.

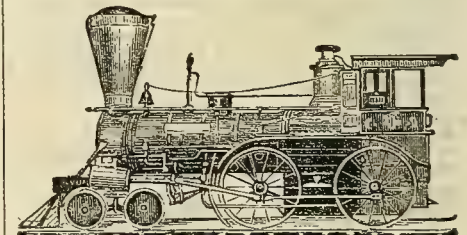
New Time Table

OF THE

NEW YORK CENTRAL R. R.

	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp.	7:40 A. M.	7:00 P. M.	7:40 P. M.
Mail	9:40 A. M.	12:50 A. M.	
New York Exp.	11:15 A. M.	9:40 P. M.	9:00 P. M.
Night Exp.	5:00 P. M.	4:00 A. M.	4:00 A. M.
Utica Accom'n.	6:00 P. M.	Ar. U. 10:40 P. M.	
N. Y. Mail	11:15 P. M.	10:40 A. M.	10:00 A. M.
	Leave Buffalo.	Leave Bridge.	Arr. Albany
New York Exp.	5:15 A. M.	5:15 A. M.	3:30 P. M.
Steamboat Exp.	8:00 A. M.	8:00 A. M.	2:30 P. M.
Mail		6:00 P. M.	4:40 A. M.
Cleveland Exp.	6:00 P. M.	11:00 P. M.	8:30 A. M.
Cincinnati Exp.	11:00 P. M.		10:00 A. M.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive
equal in efficiency and durability to the best Eastern
manufacture. Also, Shaping and Slotting Machines
suitable for railroad shops. Also, all kinds of heavy
forging and casting done at short notice. Also, bolts for
bridges cut with dispatch.
ap.20

MOORE & RICHARDSON.

THE KENTUCKY MILITARY INSTITUTE

DIRECTED by a Board of Visitors appointed by the
State, is under the superintendence of **Col. E. W.**
MORGAN, a distinguished graduate of West Point
and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges
but more extended in Mathematics, Mechanics, Ma-
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Geology; also in English Literature, Historical Read-
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regulated exercise.

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Medicine, and Law, admit of selecting studies to suit
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before and after graduating.

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Franklin Springs, Ky.," or the undersigned.

P. DUDLEY,
President of the Board;

Jan 5th.

The Railroad Record.

E. D. MANSFIELD,
T. WRIGHTSON. } Editors.

CINCINNATI:

Thursday Morning, Dec. 29, 1859.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.
To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

ADVERTISEMENTS.

A square is the space occupied by *ten lines* of Nonpareil.
One square, single insertion,..... \$1 00
“ “ per month,..... 3 00
“ “ six months,..... 12 00
“ “ per annum,..... 20 00
“ column, single insertion,..... 5 00
“ “ per month,..... 10 00
“ “ six months,..... 40 00
“ “ per annum,..... 80 00
“ page, single insertion,..... 15 00
“ “ per month,..... 25 00
“ “ six months,..... 110 00
“ “ per annum,..... 200 00
Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

THE European Agents for the *Railroad Record* are MESSRS. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

THE OHIO FARMER is one of the best agricultural papers published in the country. We always read it, which is a good deal more than we can say of many others of our exchanges. We are gratified to see by its new dress and improved appearance, evidences of success. It is not only an *indispensable* to the agriculturist, but also an excellent family paper. It is published at Cleveland, Ohio.

REGULAR TERMS IN ADVANCE.

Single copy, one year, - - - \$2 00
Three copies, “ - - - 5 00
Five copies, “ - - - 8 00
Ten copies, “ - - - 15 00
One copy, six months, - - - 1 00
Five copies, “ - - - 5 00
Ten copies, “ - - - 8 00

A club of five subscribers, at \$8, will entitle the person making it up to a copy for six months; a club of 10, at \$15, to a copy for one year.

Mr. J. E. THOMSON, President of the Fort Wayne and Chicago Road, was in town to-day and met a large number of the bondholders of that concern, including the parties at whose motion Mr. Edgerton was appointed Receiver. The meeting at first was a stormy, but after explanations were made by Mr. Thomson, the parties present appeared satisfied, and there is reason to believe that measures will be adopted vacating the Receivership, and adopting substantially the scheme put forth by the management a few days since.—*N. Y. Tribune*.

RAILROADS—JANUARY, 1859.

We have given, in the *RECORD*, a full account of Railroad progress in each year, except the last. The details, in all the States, have become too numerous and cumbersome to state at full length here; but we shall notice the general results, with some particulars, of the Western States.

In 1854, (*R. R. Record*.) the Railroads completed were as follows, viz:

In Ohio.....	2,344 miles.
In Indiana.....	1,388 “
In Illinois.....	1,909 “
In Michigan.....	434 “
In Wisconsin.....	173 “
In Iowa.....	“

In the North-West.....	6,248 “
Railroads of the North and Middle States.....	8,112 “
“ “ South.....	3,456 “
“ “ South-West.....	952 “

Aggregate in the U. States.....18,768 “

The financial difficulties of the country, in 1854, was the first serious check to the construction of Railroads. The crisis of 1857, seemed almost to put an end to them; and in the above and hasty anticipations of the day, it was thought by almost all persons, that the Railroad System, in regard to farther construction, was completely blocked up; but such was far from being the fact. Railroads have become an absolute necessity to the farmer and merchant. Hence, the new States of the frontier must have them; and in spite of all obstacles, the States of the West and South-west have progressed in the construction of Railroads almost as fast as the older States did previously. But this was not the sole cause. At the time of the first pressure in 1854, there were 15,000 miles of *unfinished* Roads. Most of this must be finished, or the debts, as well as the stocks, were absolutely worthless. In this state of things, those who were already interested pushed on, and by gathering up the fragments of property and credit, and using the lands, which many of them possessed, and issuing income Bonds, many of the unfinished roads were completed. It is true, that some of them were financially wrecked; but, after all not quite so much so as they would have been, had they never been completed—and the country is a great gainer. The places where most work has been done since 1854, are in Illinois, Missouri, Iowa, Tennessee, Alabama, Virginia, Kentucky, and Mississippi; the latter, however, not very much. The Ohio and Mobile Road, a work of great magnitude, has been pushed on under great difficulties, and so has the Virginia South-Western Road to Knoxville.

The following table presents a very nearly accurate view and comparison of Railroads, since 1854:

	In 1854.	In 1859.
In Ohio.....	2,344 miles.	2,964 miles.
In Indiana.....	1,388 “	1,900 “
In Illinois.....	1,909 “	2,750 “
In Michigan.....	434 “	669 “
In Wisconsin.....	173 “	820 “
In Iowa.....	“	231 “
In Missouri.....	69 “	646 “
In South-West.....	952 “	1,962 “

In the U. States.....18,768 miles. 27,500 miles.

Here we see that *nine thousand miles* of Railroad has been completed in the last four years—so unpropitious and disastrous to railroads generally. The average is near 2,000 miles per annum; and the average in the first year previous about 3,000 miles. Should the average of the last four years continue, as we see no reason to doubt it, there will be completed by the year 1870, full 10,000 miles more than we now have.

The progress, in the last five years, is chiefly in the West. The increase in the following States will show it:

In Ohio.....	620 miles.
In Indiana.....	512 “
In Illinois.....	89 “
In Michigan.....	235 “
In Wisconsin.....	637 “
In Iowa.....	231 “
In Missouri.....	586 “

In these seven States.....3,670 “
In the South-West.....1,010 “

In the last are not included Louisiana, Texas, Florida, or the South generally—Virginia, North Carolina, and Louisiana, have all constructed large amounts of railroad, in the last two or three years.

In respect to the future, the States of Minnesota, Iowa, Missouri, Arkansas, and the Territory of Kansas, must necessarily be the main localities of Railroad progress, to which we should add Michigan, to which also a large Railroad Grant has been made by the Government. The Michigan lines to be constructed will be about eight hundred miles. The Iowa lines as much more; Minnesota 500, and Missouri 500, in addition to what they now have. Kansas will, sooner or later, require at least 1,500 miles, Arkansas 600, and Texas 2,000 miles. There are nearly 7,000 miles to be made in these new States. It is in vain to urge the want of money and credit. The new States have lands, and the world is willing to buy them. The activity of Railroad construction is, therefore, likely to go on; and it would not be very surprising to find the amount greater than ever, though the scene of the construction is changed. The great Middle States (of which Ohio is now one,) are not likely to make much Railroad. They do not need them. The scene will be transferred to the States on the Western bank of the Mississippi and the Missouri.

The construction of 2,000 miles of Railroad per annum will occasion a great demand for capital, for artisans, and for laborers. It will require seventy millions of dollars, which will be paid out for two hundred thousand tons of Iron—equal to \$12,000,000; wood work worth \$2,000,000; depots and station houses, \$1,600,000: and the residue for labor.

Thus, we see there is a large amount of capital, labor, and artisans put in operation by this railroad construction. This construction will require 175,000 men, of all sorts, and will maintain a population of 800,000. This is no trifling matter. It is of immense consequence to the country, and we should be glad to see the work go on.

THE NEW TRANSATLANTIC TELEGRAPH PROJECT.

About a year ago we alluded to the project of a line from Newfoundland over Greenland, Iceland, and the Faroe Islands to the Irish coast. Colonel Schaffner, the proprietor, who is, of course, an American, is at present in England for the purpose of demonstrating the nature and advantages of his plan. In a lecture recently delivered by him at Glasgow, he sets forth a map of interesting information, which leaves scarcely a doubt as to the practicability of the proposed enterprise. By the working of a line of telegraph, he said, from Newfoundland to Ireland, a distance of 2,000 miles, it might be possible to send at the rate of three words per minute; but what were three words per minutes? A practical telegrapher would not require any thing further to prove that such a telegraphic line could not subserve the purposes of commerce. The celerity of the electric current in subaqueous conductors was at the rate of about one-third of a second for the first five hundred miles, and a full second for nine hundred or one thousand miles—so that, according to that progression, a line of 2,000 miles for the transmission of a single pulsation of the electric current would require nine seconds. It was necessary that there should be five or seven breakages or pulsations, as an average, to constitute a letter. Telegraphically, it requires about seven letters to constitute a word; so that for a pulsation the time required would be nine seconds, the time for a letter forty-five seconds, and the time for a word five minutes and fifteen seconds. This satisfied him of the impracticability of commercial telegraphing from Ireland to Newfoundland, or any where over two thousand miles under water.

The following statement shows the advantages of the Greenland line over the old line in point of length. The figures given represent not the sea-distances merely, but the entire telegraphic distances:

The distance from London to Quebec, by the former Atlantic line, is..... 4,150 miles.
By the projected Northern line, it is..... 3,624 "

Difference in favor of the latter.....	466 "
The new line is shorter than the old—	
From New York to London, by.....	286 "
" " Glasgow.....	406 "
" " Berlin.....	561 "
" " Hamburg.....	591 "
" " Copenhagen.....	951 "
" " Stockholm.....	1,381 "
" " St. Petersburg.....	1,810 "
" St. Louis to London.....	469 "
" N. Orleans to London.....	356 "

The greatest advantage of this project, which cannot fail to inspire capitalists with confidence, consists, however, in the fact that the longest of the sea-distances of the line over Greenland, Iceland, and the Faroe Islands, is shorter than that of submarine cables already in successful operation.

On sounding the seas between Labrador and Greenland, and Greenland and Iceland, Col. Schaffner found that there was a beautiful bottom throughout—a soft bottom, with not the slightest appearance of volcanic action; on the

contrary, the sea gradually descends from Labrador to within one hundred miles of Greenland, starting with ninety fathoms and terminating with two thousand and ninety fathoms. From that 100 mile point it ascended even as far as 40 miles through the bays into Greenland. The cannon ball, on descending with the plummet, forced it as far into the mud as it possibly could go, and the plummet drew up from the bottom what looked to be fine yellow clay. On examining this bottom there were found innumerable shells. He found that bottom all the way through. In the bays of Greenland it was a species of sand apparently; but that, too, proved to be shells.

On the side between Greenland and Iceland he was apprehensive that he would find deep cavities and volcanic mountains. Contrary to expectation, the ocean was of the same bottom as in the whole basin of the Atlantic between Ireland and Newfoundland, and all over the Northern Seas. The lowest depth of water was 1500 fathoms, and the bottom gradually ascended till it came to Iceland; it also gradually descended on the other side towards the Faroe and Shetland Islands. The temperature of Labrador and Greenland in September and October ranged between 44 and 35 degrees. The line of electric cable from Quebec could be constructed with three telegraphic wires at a cost of £300,000 sterling, including a vessel valued at \$250,000, or £50,000 sterling. It was contemplated to put down a cable with three communicating wires, thus multiplying the means of communication.

The King of Denmark has granted Colonel Schaffner a concession securing to him the exclusive use of Greenland, Iceland and the Faroe Islands, for the formation of telegraph communication between Europe and America, for the term of one hundred years. It gives him ten years to consummate the enterprise, of which five, he says, has been elapsed, but within one year the whole plan could be executed.

Another railroad has passed into the hands of a receiver. The Janesville (Wis.) *Gazette* of Dec. 19th says:

"Judge Noggle, yesterday morning, in an action brought by creditors of the Racine and Mississippi Railroad Company, decided that the assignment made by the company some time since was fraudulent and void as to creditors, and allowed an injunction, and appointed Lucius G. Fisher, of Beloit, a receiver to take possession of the road and other property of the company. This assignment was made for the purpose of enabling the Railroad Company to complete the road to Freeport, and the Judge decided that it was made for the benefit of the Railroad Co., and not for the benefit of the creditors, and therefore fraudulent in law."

A suit of sequestration has been applied for by creditors of the Cleveland and Pittsburgh Railroad. The case has been postponed, upon application of counsel, for a brief period.

LITTLE MIAMI RAILROAD CO.

The annual meeting of the Directors and Stockholders of the Little Miami Railroad Co. was held in this city yesterday, at which a Board was chosen for the ensuing year, composed of the following: Jacob Strader, John H. Groesbeck, R. R. Springer, Nathaniel Wright, James Hicks, jr., Larz Anderson, Alphonso Taft, Chas. H. Kilgour, Henry Haima, John Bacon, Abraham Hivling, William H. Clement.

This Board was elected without opposition, the only change from last year being the substitution of Mr. Clement in place of Mr. Hubbard, of Columbus.

Mr. Wright the President of the Company, submitted the following resolution to the stockholders for approval or rejection, and it was adopted by them by a nearly unanimous vote:

Resolved, That the stockholders recommend to the Board of Directors of this Company to incur the necessary expenditures and liabilities (with the concurrence of the Columbus and Xenia Company) for perfecting a connection by rail, through the streets of Cincinnati, with the Ohio and Mississippi Depot, all expenditures to be paid out of the joint funds of this Company and the Columbus and Xenia Company, as other expenses; the said Board of Directors taking care, in so doing, to make such arrangement as shall, in their opinion, best secure and protect the rights and interests of this Company.

The expressed objection by those who voted in the negative was upon the ground that it was impossible to operate the track as a passenger road and do the business of the railroads at the same time. The opinion appeared to be general that the two could not work harmoniously together.

REPORT OF THE TREASURER.

D. G. A. Davenport, Esq., the treasurer of the Company, presented the following financial statement for the year ending the 1st of December:

REVENUE.			
		Increase.	Decrease.
Passenger earnings...	\$574,375 75	\$41,702 72	
Freight earnings.....	643,672 59	29,014 30	
Express and Mail.....	58,706 39	5,538 44	
Total earnings...	\$1,276,753 73	\$76,535 44	
EXPENSES.			
<i>Repairs of</i>			
Freight cars.....	\$51,147 05	\$5,960 91	
Passenger cars.....	22,650 74		\$746 91
Locomotives.....	54,507 41		4,524 51
Station Machinery.....	3,778 22	2,599 11	
Road.....	143,964 31	35,740 65	
Bridges.....	5,900 87	3,083 22	
Water Stations.....	825 48		157 40
Depots.....	16,241 78	4,437 36	
Oil, tallow and waste..	14,039 66	2,768 36	
Fuel.....	76,802 34		934 27
Rent.....	28,661 53	26,594 58	
Books, printing, sta'y.	6,658 07		1,419 18
Taxes.....	21,258 60	11,099 76	
Loss and damage.....	10,618 60	800 47	
Transportation expenses.	253,765 94	35,123 67	
Total expenses.....	\$709,820 00	120,425 82	

A comparison of the revenue and expenses, as given above, shows that the net earnings for the year were \$566,934 73, being \$41,170 38 less than the net earnings of 1858. Adding to the net earnings \$38,488, received as dividend on stock of Columbus and Xenia Road, and we have a total of \$605,542 73. From this amount deduct \$98,994 94 for interest, and \$48,124 24 paid on account of the previous year's business, and the total net earnings amount to \$458,303 37. Of this sum, \$305,535 71 is the proportion of the Little Miami, and \$152,767 86 that of the Columbus and Xenia.

During the year the Company has declared two semi-annual dividends of four per cent. each, making an aggregate of eight, and has now on hand a surplus of over one hundred thousand dollars.

ELECTION OF OFFICERS.

The new Board of Directors met at four o'clock yesterday afternoon, and elected the following officers: President, Wm. H. Clement; Superintendent, John Durand; Sec'y., Chas. H. Kilgour; Auditor, D. G. A. Davenport; Treasurer, S. E. Wright.

Mr. Clement brings to the position the advantage of long experience, sound practical ability, and great energy. His connection with the Little Miami Company will add much to the public confidence in the management of its affairs. Nathaniel Wright, Esq., who has occupied the position of President for the past year, retires voluntarily, to give place to Mr. Clement.

MACON AND WESTERN R. R.

From the Fourteenth Annual report of the Macon and Western Railroad Company of Georgia, we gather the following facts.

The gross earnings and receipts into the treasury, from all sources, for the present year, have been:

For transportation of Freight.....	\$231,973 15
“ “ Passengers.....	131,730 95
“ “ Mails.....	10,201 75
	\$373,905 85
Interest on money loaned.....	1,344 12
For twenty-five cars sold last year and collected this.....	15,707 98

Total.....	\$390,957 95
Expenses maintaining roadway, machinery and operating same, including amount paid for State and City taxes.....	165,465 75

Net profits.....	\$225,492 20
To which add balance from last report.....	142,717 05

Total.....	\$368,209 25
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From this fund the following disbursements have been made:

Dividends No. 25, paid 1st Feb'y....	\$57,552 00
Dividends No. 26, paid 1st August....	100,716 00
Bonds paid and canceled.....	73,000 00
Interest on ditto.....	4,695 02
Wynn case, charged to profit and loss.....	9,351 23
Negro Jesse, charged to profit and loss.....	1,200 00
	\$246,514 25

Balance of assets as per Treasurer's balance sheet.....	\$121,695 00
Of this balance there is unavailable.....	
but good.....	\$11,139 83
Of this balance there is bad and doubtful.....	13,213 23
	24,353 06

Leaving an actual cash balance in the hands of Treasurer.....	\$97,341 94
To which may be added the amount due on 2,810 shares capital stock, say \$20 per share, which has been called, payable to-morrow, December 1st.....	56,200 00

Making a cash fund on hand of.....	\$153,541 94
Less bonds due January 1st, 1860.....	23,000 00

Available for dividend.....	\$130,541 94
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A liability of about \$12,000 exists against this balance for the value of 240 bales of cotton burned on the road the last month, which has not yet been adjusted with the shippers. To offset this the Company holds policies of insurance in three different Companies to the amount of \$6,100, which it is believed will be collected in the course of sixty days.

SUPERINTENDENT'S REPORT.—And from the report of the Superintendent of the Macon and Western Railroad, Alfred L. Tyler, we learn that, for the year, the operating expenses were “equal to 44 per cent of the year's earnings.”

The business of 1859 thus compares with 1858:

Years.	Passengers.	Freights.	Mails.	Total.
1859.....	\$131,730 95	231,973 15	10,201 75	373,905 85
1858.....	103,540 34	211,410 05	10,242 03	325,192 42
Increase.....	\$28,190 61	20,563 10	.....	48,713 43
Decrease.....	.....	.....	30 28	.....

This increase in freight is wholly due to the upward business, the downward traffic having fallen off nearly \$20,000, which has been made up, and the increase, by freights from the Northern ports to upper Georgia and Tennessee, caused by the additional facilities afforded by the steamship lines from Savannah, and to the general prosperity of the country, which has also materially added to the passenger traffic. In the closing month of this year, during which the cotton crop is most rapidly pressed forward to market, three separate and distinct fires have occurred to cars loaded with this freight, whereby an amount of 240 bales and six cars have been destroyed. The first was caused by the breaking of a truck under a box car, by which the wheels were brought into contact with the floor, and the consequent friction set fire to the car. The second occurred by a spark from the engine, falling on a platform car, while the train was in motion. And the last, in the same manner, to a car standing at a station. This species of loss is one which no care can wholly avert so long as cotton is carried on platform cars; although the increased capacity of these last, over box cars, and the limited time during which the cotton is sent forward, has been considered to necessitate their use.

THE REPAIRS OF ROADWAY have been thorough and expensive. A gravel train has been employed the entire summer, in widening cuts and embankments, and improving the drainage on the line; 40,000 new cross-ties have replaced decayed ones removed; 200 tons new iron with the requisite chairs and spikes, have been laid, and many of the smaller wooden culverts replaced by brick or stone; all the sidings on the road are now laid with cross-ties and heavy iron, in place of stringers and flange rail. The decrease in this account is attributable mainly to the lessened cost of iron used for renewals. The defective bars removed from the track last year, have been re-rolled at the new rolling mill in Atlanta, at a total outlay of \$30 per ton, against \$60 last year paid for new iron. The amount of material on hand to the credit of this account, including old iron taken from the track, will be seen in the inventory.

The yearly repairs of the road have been \$33,970 00. This amount being made up of the annual renewals of cross-ties, 40,000 at 30 cents, \$12,000; labor of 100 negroes with overseer and supervisor, an average of \$200 each, (including food and clothing,) \$20,000—in all \$32,000. While the remainder, varying from year to year, consists of gravel train expenses, repair tools, etc. Since the 1st December, 1849, the road bed has absorbed nearly 400,000 ties, equal to twice the amount necessary for the entire road. Decay, not arrested by the winter months, as at the North, is constant, and reduces the life of ties to an average of but five years, against eight to ten in colder climates. This annual demand is rapidly decreasing the supply and deteriorating the quality of timber, and it would seem that some means of preserving this should be adopted. It is said that the use of chemical agents, such as Chloride of Zinc, pyrolignite of Iron, etc., has been found to double the duration of timber at the North and abroad at a comparatively small expense, not exceeding 6 or 7 cents per tie. If such is the case, it would be especially advantageous for roads like this, where under a light tonnage decay is the sole destroying agent.

THE RENEWALS OF IRON have been, as yet, to but a limited extent, as the rail now on the road has been laid but little over eight years; had this been of good quality, none should have been needed with so light a traffic.

The amount laid since 1855 has been 600 tons, of this 350 laid in 1856 and '58 was from the Phoenix Works of Pennsylvania, weight 57 lbs. to the yard, and length of bars 24 feet. It has as yet proved a reliable rail. All this, together with that used this year, has been laid with wrought iron chairs from the same mill, weighing 12 lbs. each, and rolled to fit closely the tread of the rail, making a firm, smooth joint, and the best yet in use on the road.

THE “MAINTENANCE OF ROLLING STOCK” has been 21½ per cent of the total expenses; a yearly of \$32,020, or 16 74 cents per mile run; of this last amount half is due to engines, seven-sixteenths to freight cars, and one-sixteenth to passengers cars.

THE ANNUAL RENEWALS OF ENGINES amount to 11½ per cent on the original cost, while the depreciation exceeds this nearly 2 per cent yearly, and is chiefly among the older class of engines, which have been rebuilt and repaired till it is inexpedient to carry this further, and their present value is but little more than that of the material; of these, the engine reported “condemned” is probably the worst. To make it available for use, would require an amount fully equal to the cost of a new engine, as the high price of labor and material, compared with the same at the North, would more than counterbalance the value of any of the old material that could be “worked in.”

THE REPAIRS OF FREIGHT CARS are 6.34 cents per mile run, and 12½ per cent on the original cost—of passengers cars, 1.87 cents per mile run, and 15 per centum on the same. In these two last items no depreciation has occurred, the cheapness of lumber enables cars to be built in the repair shops at a lower rate, and of better quality, than they could be obtained from the North.

“OPERATING ENGINES AND TRAINS” forms 34.38 per cent of the total expenses, or 27 cents per mile run. The items composing this heading are sufficiently self-explanatory. With the exception of “fuel,” none should increase under the present business of the Company, and even that increase must be a very gradual one.

Including miscellaneous expenses, the heading of which has been fully explained in previous reports, the total amount of operating expenses averages \$148,471, or 78.82 cents per mile run, and has been 49.7 per cent of the gross earnings, or average

Earnings.....	\$298,466 00
“ per mile of road.....	2,905 00
“ per mile run.....	1.58 4
Expenses.....	\$148,471 00
“ per mile of road.....	1,431 00
“ per mile run.....	78.82

LITTLE MIAMI AND COLUMBUS AND XENIA R. R.

The Annual meeting of the stockholders in the Columbus and Xenia Division of this line, will be held in the Company's office in Columbus, on the first Tuesday of January. The general results of the year's business were presented on yesterday in the report of the Little Miami meeting. It is quite possible that Mr. Hubbard will retire from the Presidency of the Columbus and Xenia road—and Judge Swan has been spoken of as likely to be elected in that event.

In addition to the elections, reported in yes-

terday's Commercial, at the Little Miami meeting, we add the following: Superintendent, John Durand; Secretary, Chas. Kilgour; Treasurer, D. G. A. Davenport; Auditor, S. C. Wright.

The two gentlemen last named do not come into contact with the general public so often as do other officers of a Railway Company; their successive re-elections, *nem. con.*, attest their official status. The Secretary of the Company is still a young man, but has given evidence of a legitimate ambition to perpetuate the reputation, if not the name, of the honored house of which he is the representative. His successful efforts in opposition to schemes for plundering the City Treasury have proved his correct estimate of at least one of the duties of a good citizen, while, for the nearly realized street connection between our East and West end depots, the Railway Companies and the no less benefited Public are principally indebted to the vigorous and timely exertions of the Secretary of the Little Miami.

The re-election of Mr. Durand, with the hearty concurrence of the new President, was a thoroughly deserved tribute to an officer who has known but one interest, and that the interest of the proprietary of the Roads in his charge.—*Cin. Com.*

COVINGTON AND LEXINGTON RAILROAD.

The annual meeting of the Covington and Lexington Railroad Company was held at the office of the Company in Lexington last Wednesday, at which the annual report was submitted.

The meeting was called to order by President John T. Lewis, when Judge Samuel, of Paris, was elected Chairman, and Geo. M. Clark, Esq., Secretary.

ANNUAL REPORT OF THE PRESIDENT.

Mr. Lewis submitted the annual report of the Directors. After reciting previous action concerning operations pending the sale of the road, and stating the inability of the Stockholders' Committee to make any satisfactory arrangement concerning the difficulties of the road, he recapitulated the circumstances of the sale, all of which was laid before our readers some time ago. The funds which accrued, less expenses, after the decree was entered until the sale, amounting to \$22,973 54, was paid over to the Commissioner, and the amount which accrued from the date of sale until its confirmation, and the appurtenances of the road were paid to R. B. Bowler.

The report says that a large portion of the Bills Payable and stock subscriptions are worthless, and were taken under the custody of the Kenton county Court, by attachment of creditors, and that a Receiver was appointed to collect them. Of the liabilities unprovided for, (\$944,109 77,) nearly the entire amount is due, and the balance will be due February 1st, the last issue of income bonds maturing on that day. The Secretary submitted the following financial report, viz:

ASSETS OF THE COVINGTON AND LEXINGTON R. R. CO., OCT. 5TH, 1859.

Construction, (including track, right of way, etc.)	\$3,743,971 16
Locomotives, 14	123,334 00
Passenger cars, 10	19,612 19
Freight cars, 24 (including three freight baggage cars)	133,078 06
Baggage cars, 4	6,881 69
Construction cars, 16	6,230 09
Hand and dump cars, 20	3,460 47
Real estate	109,029 81
Shop, tools and machinery	31,654 04
Income Bonds on hand	105,000 00
Accounts against subscribers and others	77,044 77
Bills receivable, R. R.	
Sanford	\$8,240 00

George Milne	5,000 00
Sundry notes	3,138 10
	16,378 10
Cash on hand	4,375,684 29
	309 00
Total	\$4,375,993 29

LIABILITIES OF THE COVINGTON AND LEXINGTON R. R. CO., OCT. 5TH, 1859.

Capital Stock	\$1,582,169 37
Less amount issued to Cincinnati as collateral	200,000 00
	\$1,382,169 37
Capital stock issued for Bourbon Co. tax subscription	2,150 00
Capital stock issued for interest on capital stock	4,750 00

MORTGAGE BONDS.

1st Mortgage Bonds, 6 per cent.	\$160,000 00
1st " " 7 " "	260,000 00
2d " " 7 " "	1,000,000 00
3d " " 7 " "	600,000 00
	2,200,000 00

GUARANTEED BONDS.

Company's Bonds for Cincinnati	100,000 00
" " Covington	200,000 00
	300,000 00

INCOME BONDS.

Income Bonds, dated July 10, 1854, due July 10, '59, bearing 10 per cent. interest	200,000 00
Income Bonds, dated Dec. 1, 1854, due Dec. 1, '59, bearing 10 per cent. interest	200,000 00
Income Bonds, dated Feb. 1, 1855, due Feb. 1, 1860, bearing 6 per cent. interest	210,000 00
	610,000 00

Bills payable, old	20,371 46
" " current	2,000 00
	22,371 46

Amounts due sundry persons, mostly in stock	13,449 68
Profit and loss	21,112 78
Total	\$4,375,993 29

FINANCIAL EXHIBIT OF THE LIABILITIES OF THE C. AND L. R. R. CO., NOV. 1, 1859.

LIABILITIES.

1st Mortgage Bonds, 6 per cent.	\$160,000 00
1st " " 7 " "	260,000 00
2d " " 7 " "	1,000,000 00
3d " " 7 " "	600,000 00
	\$2,020,000 00

C. & L. R. R. Bonds exchanged for Cincinnati Bonds	\$100,000 00
C. & L. R. R. Bonds guaranteed by City of Covington	200,000 00
	300,000 00

Income Bonds issued July 10, '54, due July 10, 1859	\$200,000 00
Income Bonds issued Dec. 1, '54, due Dec. 1, 1859	200,000 00
Income Bonds issued Feb. 1, '55, due Feb. 1, 1860	210,000 00
	610,000 00

Bills payable, past due	\$20,371 46
Bills payable due, 3 per ct., June, 1860, " mortgage "	2,000 00
	22,371 46

Amounts due sundry persons, mostly in stock	13,449 68
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Coupons past due, Second Mortgage Bonds	\$105,000 00
Coupons past due, Third Mortgage Bonds	63,000 00
Coupons past due, Guaranteed Bonds	18,000 00
Coupons past due, Cincinnati Bonds	12,000 00
Coupons past due, Incomes, July issue	37,500 00
Coupons past due, Incomes, December issue	34,500 00
Coupons past due, Incomes, February issue	17,400 00
	287,400 00

Interest due at 5 per cent. on Coupons past due	14,311 50
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Total	\$3,267,532 64
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From this total deduct the amount the Road, etc., brought at public auction, October 5, 1859	2,125,000 00
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Liability still against the Company	\$1,142,532 64
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MEANS IN POSSESSION OF THE COMPANY TO PAY OR REDUCE THE ABOVE LIABILITY.

Income Bonds on hand	\$105,000 00
Amount due from sundry subscribers, mostly worthless	77,044 77
Bills receivable	16,378 10
	198,422 87

Amount still unprovided for. \$944,109 77

EARNINGS AND EXPENSES OF THE COVINGTON AND LEXINGTON R. R., FROM NOVEMBER 1ST, 1858, TO OCTOBER 5TH, 1859.

From Car Rent	215 84
" U. S. Mail service	10,204 16
" Adams Express Co.	8,537 72
" Passage	155,654 69
" Freight	284,207 27
	458,820 99

EXPENSES.

For Wood	\$14,830 33
For Coal	1,552 62
For Oil	4,260 21
For Tallow	799 20
For Waste	1,312 36
Repair of Locomotives	13,446 24
" Passenger Cars	8,113 25
" Baggage Cars	106 05
" Freight Cars	17,859 19
" Hand and dump	439 19
" Road	46,623 36
" Bridges	4,089 83
" Water Stations	1,517 55
" Tools and Machinery	5,129 88
" Depot and cat. pn's	1,946 24
Rent Paris & Lex. Division	28,312 07
" Lex. & Nicholasville	9,014 42
Current running expenses	49,418 92
Pumping water	3,456 51
Sawing and hauling wood	7,466 40
Printing, advertising and stationery	2,008 85
Incidental expenses	5,421 52
Loss and damage	3,320 39
Office rent	625 18
	\$231,036 22

Balance being net earnings eleven months nine days	227,734 77
	\$458,820 99

EARNINGS OF THE C. AND L. R. R. FOR ELEVEN MONTHS FIVE DAYS, ENDING OCTOBER 5, 1859, AND COMPARISON WITH PREVIOUS YEAR:

	1857.	1858.	Increase.	Decrease.
January	\$43,966 59	46,778 19	2,811 60	
December	46,493 90	35,908 24		10,585 69
	1858.	1859.		
January	26 198 12	35,978 29	9,780 17	
February	23,512 60	30,663 23	7,150 63	
March	30,912 08	38,326 48	7,414 40	
April	32,265 90	37,638 47	5,372 16	
May	37,893 19	42,566 02	4,672 83	
June	34,174 83	37,553 10	4,378 27	
July	39,819 76	43,650 24	12,830 48	
August	41,934 09	48,010 37	6,076 28	
September	48,165 12	52,795 46	4,630 34	
Oct (5 days)	7,148 56	8,933 31	1,784 75	

Totals	\$403,484 74	458,820 99	65,921 91	10,585 66
	403,484 74	10,585 66		

Total increase.....	\$55,336 25	55,336 25
Copy:	G. M. CLARK, Sec'y and Book Keeper.	

REPORT OF THE SUPERINTENDENT.—Superintendent C. A. Wither's Report was not presented; but the report represents that the operating expenses of the road, including rent of other roads, were 50 3-10 per cent. of the earnings, and 42 1-5, excluding rent of other roads. The cost of repairs of locomotives, including oil, tallow, waste, &c, was 6 2-5 per cent. per mile. The road is generally in good condition, but some of the bridges need moderate repairs.

ANTI-BOWLER MEETING.—During a recess, at noon, some of the principal stockholders met, and made a Directors' ticket, excluding all the old Board, and Jno. B. Casey, of Covington, and Mr. Edward Oldham, of Fayette, but the arrangement afterward went under. This was regarded an anti-Bowler demonstration, and the other side was invited to say something.

Mr. Oldham preferred to be left out of the Board. He had no prejudice against Mr. Bowler. It is not important to Kentuckians who own the road, if it is well managed. They had no idea the stock would ever be profitable. He suggested the name of J. D. Carr in his stead, and it was agreed to.

AFTERNOON SESSION.—M. M. Benton, Esq., moved the adjournment of the report of the officers, but afterwards modified the motion that the report be received.

Peter Zinn, of Cincinnati, thought it hard to ask gentlemen who thought their property had been sacrificed to approve the report, but

he was willing to thank the officers for the discharge of duty.

Mr. Benton desired an endorsement of the facts reported, not an approval of the Board's policy.

Mr. Benjamin Eggleston, President of the City Council of Cincinnati, representing the stock of this city, thought it was asking too much to require the city to approve the policy of the Directors. It was more than he could swallow. The result of the Board's policy was bad.

Dr. Stevenson moved a reference of the reports to a committee to an adjourned meeting, to be held on Jan. 24th.

Mr. Benton insisted that Cincinnati was not a stockholder in the road, and disputed Mr. Eggleston's right to speak at a meeting of stockholders. Cincinnati is only a creditor, holding \$200,000 stock as collateral security. Cincinnati had never assisted the road when it needed aid, although she received its benefits. Mr. B. gave Cincinnati a general raking down for not helping the Kentuckians to carry their heavy load.

Mr. Benton also recapitulated the efforts the Directors had made to save the road, and regarded a refusal to endorse the facts in the reports, as an impeachment of the integrity of the officers. They have done all they could for the road, and some had broken down in their efforts.

Judge Moar, of Covington, wanted the reports received. He assigned as a reason why the report should not be received, was that the case is pending in the Court of Appeals.

Col. Finnell, of Covington, defended the Directors, and advocated the endorsement of the facts they had reported. Mr. Eggleston wanted to know why the road was sold. He answered "because the Kentuckians were honest." He had much sympathy for the Directors, some of whom had been ruined by the road. He was opposed to a reference, because it would impeach the integrity of the Board.

Mr. W. Moar disclaimed any intention to impeach the Board, but thought they had committed errors. He believed that when the Board discovered themselves personally involved in the road, they had forced securities upon the market at ruinous rates to save themselves. The stockholders were therefore averse to sacrificing their property to pay the face of securities that were put in the hands of sharpers at ruinous rates. He had been informed that not a single Director had paid a dollar of his private means to benefit the road. Mr. M. proceeded at greater length in a similar strain in opposition to the adoption of the report.

Mr. Eggleston attempted to speak again, but objections were raised that Cincinnati was not a stockholder. He was finally allowed to go on by leave. He vindicated Cincinnati against the charge of selfishness, and pitched into the management of the road in the "honest courts of Kentucky." He was satisfied there was something rotten in the matter.

After some further speeches, the motion to refer the report to a committee, to report to an adjourned meeting on the 25th of January, was adopted by a decided majority. Peter Zinn, of Cincinnati; Dr. Stevenson, of Covington; Gen. Desha, of Harrison county; Wm. C. Lyle, of Bourbon; Richard Stowars, of Pendleton; and Judge C. D. Sarr, of Fayette, were appointed upon the Committee.

A NEW BOARD.—The following gentlemen were then elected, to serve as Board of Directors for 1860, viz: A. L. Greer and E. T. Clarkson, of Covington; Richard Stowars, of Pendleton county; G. H. Peroni and James Shaway, of Harrison; Wm. C. Lyle and Brutus J.

Clay, of Bourbon county; C. D. Carr, of Fayette county; and Peter Zinn, of Cincinnati.

The new Board was elected in order to comply with the charter, and contest the case in the Court of Appeals.

THE POWERS OF RAILWAY CONDUCTORS.

A case has lately been tried in the Superior Court of the County of Suffolk, Massachusetts, before Judge Morton, which is somewhat interesting from the result arrived at by the jury after listening to the rather singular charge of the Court. The case is that of R. B. Forbes, Jr., vs. the Old Colony and Falls River Railway Company. The action was brought by the plaintiff to recover damages from the defendants for being ejected from their cars in passing from Dorchester, to Boston. The damages were laid at one thousand dollars, the plaintiff setting forth in his writ that he was ejected upon a bridge in a dangerous place, that his life was endangered, and he was caused much loss of time, detention from business, great expense, great mental pain and suffering, and reproach to his character and reputation.

The defendants in their answer alleged that it was the duty of the plaintiff while passing in their cars to conform to the usual regulations of the Company and to the reasonable requirements of the Conductor in the control of the cars and train, and that the plaintiff's right to pass in their cars depended upon conforming to such regulations and requirements; that the plaintiff refused so to conform, and wilfully persisted in violating them, and that he was rightfully ejected from the cars, while and because he was *persisting* in such disobedience.

In the testimony given in the case it appeared that on a cold morning in the second week of October, with the wind at the Northwest and before stoves had been put in the cars, the plaintiff got into the cars at Harrison Square, Dorchester, and took his seat in the midst of other passengers, on the windward side, and raised the window. The passenger sitting on the next seat behind him immediately requested him to close the window, saying it was too cold. The plaintiff replied that it was not too cold for himself and that the passenger might change his seat. This passenger then, at the suggestion of another passenger who testified that he also found it uncomfortably cold, applied to the conductor to have the window closed on account of its being uncomfortably cold. The conductor thereupon, judging himself as he testified that it was too cold and uncomfortable in the car with the window open, requested the plaintiff to close the window, saying, that the other passengers complained that it was too cold. The plaintiff replied that it was not too cold for himself, that he had a right to have his window open and the other passengers might change their seats.

The Conductor told him the window must be closed; that there was a saloon in the forward part of the car with three windows in it, and he might have that to himself and have all the windows open. The plaintiff replied that he should sit there and have the window open. The conductor closed the window—the plaintiff opened it—the conductor closed again, and the plaintiff thrust his elbow through it. The conductor then stopped the train and told the plaintiff he must get out. The plaintiff offered to pay for the damage done, but the conductor declined to receive it, and compelled him to leave the car. It was further testified by the conductor that it was his intention at the time to cover up if practicable the open space, in order to shut out the wind, and he supposed

the plaintiff would oppose it, but he did not mention this to the plaintiff, nor attempt to do so (there being nothing in the cars with which to do it) nor did the plaintiff intimate that he should try to prevent it, or should offer any further resistance or disobedience of any kind.

On the question of damages the plaintiff himself testified the bridge on which he was obliged to get out was dangerous, and that another train came along very soon after and endangered him further; and that, besides loss of time and detention from business and expense and mental pain, he had suffered great reproach to his character and reputation in the community; and that boys in the streets, as he passed along, hooted at him, and pointing, cried out, "that is the man that got turned out of the cars."

The Court instructed the jury that the conductor had, as incident to his duty of control and management, authority to regulate the opening and closing of the windows, as well as to regulate the train in other respects; and that it was the duty of the passengers to obey the requirements of the conductor, provided they were *reasonable*, of which the jury were the judges; and that for the purpose of enforcing compliance with such reasonable requirements and regulations, and in order to prevent further disobedience or violation of them when reasonably apprehended, the conductor had the right to eject a passenger refusing to comply or persisting in disobeying; but that he had no right to eject a passenger as a punishment for what he had already done, and after no further disobedience was reasonably to be apprehended. That was to be punished elsewhere and otherwise.

The jury after being out for a considerable time, returned a verdict of five dollars for the plaintiff. This verdict (being for less than \$20) obliges the defendants to pay only one dollar and twenty-five cents, and leaves the plaintiff to pay the residue of the costs of Court.

From this verdict, which is a nominal verdict for the plaintiff, it is evident the jury considered that the conductor, in ejecting the plaintiff, exceeded the *technical* limit of the law, but yet practically did right. They probably considered that, as the window was already broken, and no attempt was made by the conductor to the open space, no *further act of disobedience* from the plaintiff was reasonably to be apprehended, and therefore he could not be regarded as being ejected from reasonable fear of *further resistance or violation* of regulations. If, however, the conductor had ejected the plaintiff after the window was first closed, and before it was broken, or after the first refusal to have it closed, or had covered up the open space, and plaintiff had attempted to remove or to prevent it, the legal conclusion would obviously be different.

The extreme latitude of conduct which, according to the ruling of the Court, is allowable to any passenger who may choose to rebel against the rules of the company and thereby annoy other passengers, we think is very ill advised.—The theory of the Court that Forbes was not *persisting* in disobedience, is wrong. If Forbes had been a reasonable being, he would have known that his act discommoded and annoyed, and very likely endangered the health of every person in the car. Suppose that he had pulled the brake line and stopped the cars upon the plea that they were proceeding at a rate too rapid for his comfort or notions of safety? or suppose he had committed some nuisance in the passage way or on the seats of the car, would the same plea that he was not *persisting* in disorderly conduct, be made? Had he not already given *prima facie*

proof that he would not conform to reasonable regulations, even to the destroying of the property of the company, and the *continued* annoyance of other passengers? By every known rule of law he was *persisting* in his disobedience, and by every known rule of common sense and propriety he had forfeited his right to ride in the cars, unless in care of a guard or a police officer. If Mr. Justice Morton had been practically familiar with railway operation, he would know that under his ruling, a half a dozen empty headed but full pocketed gentlemen of this class could most seriously obstruct railway traveling. One of them could break the windows, another cut the signal cord or wind up the brakes, another unshackle the cars, another commit the most unsavory nuisance in the cars, on the ground that they were willing to pay for it and not persist in doing the same thing again.—The great mass of travelers do not need rules and regulations to keep them in order; but rules are needed for the disorderly, and when they break the rules, out of the car they should go, no matter whether they offer to pay for the damage they have done or not.—*American Railway Times*.

THE VICTORIA BRIDGE OPENING.

The Montreal papers of Monday contain full and interesting reports of the proceedings attendant on the opening of the Victoria Bridge for traffic, which took place on Saturday last. The *Transcript* says:

Precisely at one o'clock the train which was to cross the Bridge started from Point St. Charles station. It consisted of fourteen cars, which were drawn by two locomotives.—The locomotives were gaily decorated with evergreens and flags, the national banners of Great Britain and the United States being the most conspicuous. The living freight of this enormous train must have numbered upwards of seven hundred souls, and at least half of the party being of the gentle sex. We observed in passing through the cars, General Williams, Col. Rollo, Bishop Fulford, Rev. Dr. Mathieson, Hon. John Ross, Hon. John Rose, Hon. John Young, Hon. Louis Renaud, Hon. James Ferrier, Mr. Whitney, M. P. P., Hon. A. A. Dorion, M. P. P., Hon. Mr. Loranger, M. P. P., Mr. A. M. Ross, Engineer of the work, Mr. Kay, President of the Board of Trade, several of the City Aldermen, and, as we have already said, a very large proportion of the best known citizens of Montreal. All being on board, the train began to move, and very soon entered the bridge, which it safely crossed. From the time that it entered the tube, till it emerged on the St. Lambert side, precisely eight minutes elapsed. Passing through the tube, we may say, has an effect very much the same as that of passing through a tunnel. The small eyelets occurring here and there in the tube, let in little more light, when a train is passing through, than is sufficient to make darkness visible. Without the lamps in the cars, the passengers would have been in almost total darkness. When the train emerged on the St. Lambert side, it proceeded a few miles further on to the Charent junction, where the present main line is joined by what is now only a branch from Longueuil. Some stoppages took place at this and other points, and it was about two o'clock before the train got back to the Bridge. It occupied seven minutes and a half in re-passing through the tube.

A splendid collation had been laid out in what we may call the stone chamber forming

the entrance of the Bridge before the tube commences. The tables were set on either side of the track, Mr. Hodges having an elevated table for some of his principle guests about half way down the chamber. It formed a lofty apartment of magnificent dimensions, quite ample enough to serve the peculiar purpose to which it was now turned. Prince's Band occupied an elevated dias at one extremity, and played in excellent style before and during the entertainment. The other extremity of this unusual festive chamber was formed by the entrance of the tube, over which is the inscription—"Built by James Hodges, for Sir Samuel Morton Peto, Bart., James Brassey, and Edward Ladd Betts, Contractors."

The *Gazette* adds to its report the following:

Before closing this account of the virtual opening of the Victoria Bridge, it will not be out of place to state that the bridge has been subjected by the English Engineers, as we understand, to the most severe tests. Wagons loaded with stone to their utmost capacity have been drawn over it by two locomotives attached together, and a strain produced equal to three or four times that which can be produced by ordinary freight trains. It is after such a test Mr. Bruce declares that no better or stronger work can be found any where. We subjoin a return of the produce already sent across the bridge. In doing so we feel we may congratulate Mr. Hodges, the contractors, the engineers, the company, the city, or rather the whole country, that this truly gigantic undertaking is thus triumphantly completed—that the immense expenditure of money upon it has at last achieved a practical result.

POINT ST. CHARLES STATION, }

December 17, 1859. }

Statement of Freight carried over the Victoria Bridge during the last five nights:

FROM WEST TO EAST.

162 cars, containing:
11,723 barrels flour,
1,552 barrels pork,
140 bales cotton,
119 tons general goods.

FROM EAST TO WEST.

130 cars, containing:
534 tons general goods,
170 tons iron,
39,000 feet lumber.

REPORT OF THE SUPERINTENDENT OF THE WESTERN AND ATLANTIC RAILROAD, BELONGING TO THE STATE OF GEORGIA.

To His Excellency, Joseph E. Brown, Governor of Georgia:

SIR:—In conformity to the requirements of law, I herewith submit a condensed statement of the working of the Western and Atlantic Railroad, from the last day of September, 1858, until the first day of October, 1859, inclusive:

It will be seen by this statement (from the accompanying tables,) that the gross earnings of the road have been \$832,343 03; working expense \$377, 801 50, leaving \$454,541 53.

This sum of \$454,541 53 is usually set forth as "net profits." This I never regard as reliable, for the reason that there are large outlays, often *outside* of what are denominated "working expenses"—expenses which may absorb the entire so-called net profits; and it is these outlays mainly, wherein consists the good or bad management of a road. The classification of expenses is an arbitrary thing, or a matter of taste, or what may be worse than either of these, a matter of deception either intentional or unintentional. Many items of outlay, which properly belong to working ex-

penses, may be put to construction, incidental, &c., and thus it may seem that the road has been worked very cheaply until one is brought to understand that the *net profit* is mainly absorbed under some *fancy* heading, in which no money is to be found.

If I understand myself, nothing is "net profit," but what is to be found in the shape of money, after the payment of all expenses, and the road and its appurtenances in as good condition as when the work of the year commenced; if the road is in a *better* condition, together with its appurtenances, at the end of the year, the property is that much more valuable, and is thus in condition to yield better profits *afterwards*; but still, a statement in a report might be easily made that the "net profits" of the road had been taken up in part or in whole, in improvements of various kinds, from year to year, and still no money paid to the owners. These general remarks are in my estimation correct, and in making a statement to your Excellency, of the workings of the road for the last fiscal year, am willing and wish to be judged by them.

The Treasurer's Report will show that there has been paid into the State Treasury the sum of \$402,000, and a balance on hand, first day of October, of \$79,054 51.

In my report to you last year, I said, "I may add, also, that during the year, there has been bought and paid for, 1,000 tons of iron, four hundreds of which is nearly laid down: the other six hundred tons I hope to have down by the first day of January next."

This was accordingly completed soon after the first day of January, and since, there has been bought and rerolled together 1,040 tons more, which is paid for, and nearly laid down, making together in the two years of your administration 2,040 tons of heavy T rail, which, with new rails taken from sidings, covers about 27½ miles of road. This new iron, together with other permanent improvements in the road, in the shape of ballasting, new bridges, and bridge repairs, deep ditching of the track, new timbers in road bed, improved condition of machinery and rolling stock, &c., makes the road (as I think) worth all of 200,000 more than it was two years ago.

The new bridge across Petit's creek, built by W. G. Gramling, is, in my opinion, the best wooden bridge I have ever seen.

The machinery, in charge of Mr. John Flynn, and rolling stock, in charge of W. G. Gramling, is in excellent order; as an evidence of which the trains have been run with great regularity, and with nearly an entire exception from what are called accidents. This could not be done on a bad road, and with bad machinery and rolling stock, nor could it be done with good road bed, good machinery and good rolling stock, if in charge of incompetent men; but it is due to the runners, conductors, and track hands, to say, they cannot, in my opinion, be surpassed, as to the general faithful discharge of the duties in their various positions; this is no idle encomium; it is deserving.

In the transportation department proper, there has been great dispatch in the transmission of goods. The able head of this department, Mr. E. B. Walker, gives his untiring attention to its complex details, and, aided by the excellent clerks and agents, has given general satisfaction to the thousands whose goods they have put through to their destination; and I may add, that the business in every department has been managed with ability, promptness and despatch, by those having charge of its different departments.

It is known to your Excellency, that on the first day of January last, twenty thousand dol-

lars of the bonded debt of the road become due; this has been paid, together with coupons due, on the balance of that debt, not yet due, making the sum of \$24,865 00. This was "net profits"—and also a judgment on old cotton claim, which had been in law for many years, and decided adverse to the road, and other old claims amounting to \$3,378 58; these items put to the \$402,000 paid into the treasury, makes the sum of \$430,243 58; but for the purchase of such a large amount of iron, and these old debts, the road would have paid into the treasury very easily \$450,000, and left on hand an excess sufficiently large to meet any probable contingency; and I may add, that for the heavy additional expense of bridging (not likely soon again to occur) this sum could have been still farther increased. The road bed proper, in charge of Messrs. R. M. Gramling and M. Dooley, is in first rate order for the coming winter, with plenty of wood for engines and ties for road.

It should never be expected by the owners of this road, that its "net profits" on work done should be equal to the "net profits" from same amount of work done by other roads in the State; first, because there is no other road so costly to keep up, arising from its being a continued series of curves from one end to the other, making it very expensive to keep up; and secondly, this road has not, nor never can have much cotton to freight; an article which bears a much more remunerative tariff, than the hauling of coal, limestone and various other heavy commodities having great weight to little worth, and almost unknown to the business of other roads in the State.

As to this road's yielding as much profit according to original cost as other roads in the State, that would necessarily depend on not only the original ratio of cost, but on various other considerations, so that I suppose no one but politicians and partisan scribblers would express such an idea. This road, after having originally cost more than *double* per mile than other roads in the State, would not be expected by thinking men, that because its original cost was doubled, that *therefore* its profits should be equal to the *cost*. That the road was badly laid out originally, and the work done, was done by an extravagant expenditure of money, can admit of no doubt; and it would be madness in any one to expect now to convert both these great evils into *sources of revenue*, which would have to be the case, if original cost of road and profits had to keep pace one with the other.

I have the gratification to conclude this report by stating to your Excellency, that our indebtedness always is paid monthly, that we owe nothing but what we are ready to pay, and that should the Legislature see fit to send a committee to examine into the condition of the road, they will find it satisfactory, and will, I think, so report.

The Western and Atlantic Railroad is a *final success*; which should be to every citizen of the State to which it belongs, a matter of not only laudible State pride, but of *gaudeo*—so far as the humble part I have had in this success is concerned; it is mainly attributable to the wise counsels you have given me, to the firmness with which you have sustained me in carrying them out, and the efficient aid and co-operation of the men with whom it has been my good fortune to be associated, to whom I wish now to offer the homage of my thanks, and to assure them that to that grave which I must shortly reach, I shall carry the kindest wishes for their prosperity and happiness.

Respectfully submitted,

JOHN W. LEWIS, *Sup't.*

The gross earnings from September 30, 1858, to Sept. 30, 1859.....	\$632,343 03
The working expenses from Sept. 30, 1858, to Sept. 30, 1859.....	377,801 50
Net profits from the business of the present year.....	\$454,541 53
Expenditures for equipment and depot buildings, including Chattanooga passenger shed and division houses.....	18,521 01
For right of way and Real Estate.....	699 27
Amount paid into State Treasury.....	402,000 00
There has been paid since Sept. 30, 1858, indebtedness incurred under former administrations:	
For expenses.....	\$6,358 40
For equipment and construction.....	8,106 12
For bonds redeemed and coupons.....	24,865 00
	\$39,329 52
The above amount of working expenses includes the amount paid for new rails, spikes, etc.....	\$49,26 51

KENTUCKY.—The Governor, in his late Message to the Legislature, is not very clear in his language as to the Banks. In one paragraph he disclaims against them, in another they are the foundation of prosperity. We would infer that the message is a piece of mosaic, in which the parts are contributed by a variety of authors without due consultation as to the coloring and harmony of views.

In one paragraph he arrives at the fixed conclusion that the Banks have become the "instruments of oppression instead of the handmaids of industry." Thirty lines lower down we find him taking pleasure in saying "that the present Banks of Kentucky have been as well managed by their very efficient and highly capable officers as any in the country. It is a matter of just pride for us to know that, while during the revulsion of 1857 nearly all the banks of neighboring States suspended specie payments, not a Bank in Kentucky closed its doors. When our Banks were charging 1 to 2 per cent. for Eastern Exchange, adjacent States were charging 3 to 10 per cent. Our Bonds were at and above par, and theirs greatly below, when these Bonds were probably just as secure. Our State credit rose with the revulsion, while theirs fell, which was chiefly owing to the solvency and judicious management of our Banks."

The Governor should explain, for the benefit of the 'uninitiated, why it is that institutions

1st. Well managed by very efficient and highly capable officers,

2d. Maintaining their solvency amidst an almost universal suspension,

3d. Furnishing Exchange at one third the rate charged by their neighbors,

4th. Maintaining the State credit chiefly by their solvency and judicious management,

Should be branded as the *instruments of oppression, instead of the handmaids of industry?*

The last Lafayette Journal has the following in regard to the present position of affairs upon the Logansport, Peoria and Burlington Railroad.

We are informed that the opening of the above railroad has been delayed by circumstances which have assumed, latterly, quite a belligerent character. It seems that but half a mile or so of track in Cass County remains to be laid, but this is held by a party of laborers and contractors who "refuse to make the connection," or deliver possession, until their arrearages are paid. These amount to several thousand dollars, in addition to which the railroad is indebted to other contractors, not co-operating with the above in their forcible proceedings, to the extent of upward of \$25,000. The railroad claims that its cash-crop has wholly failed this season, but profess a willing-

ness to turn out stock, notes, &c., which, however, the force-and-arms men refuse to receive—charging that "the rhino" is on hand, but the officers of the company are juggling with it for their personal profit. The non-combatants, on the contrary, would be glad to take the stock notes, but the payment is conditional—upon the full completion of the road by New Year; and they are apprehensive that their pugnacious brethren will retard this completion beyond that period. In the meanwhile, the latter hold the "break," hostile and well-armed, and thus far the company has been unable to pacify them, or obtain possession of their road-bed. As yet, no collision has taken place, and the probability is, (reasoning from the ordinary history of such affairs,) that the matter will be speedily compromised, and the road put into running order.

PITTSBURG, FT. WAYNE AND CHICAGO R. R.—We give the following letter from Mr. Cass, the President of the this Company:

OFFICE PITTSBURG, FT. WAYNE & CHICAGO R. R. Co. }
Chicago, Dec. 16, 1859. }

EDS. *Times—Gentlemen*:—Through your columns I desire to assure the shareholders of the Pittsburg, Ft. Wayne and Chicago Railroad Company, that the Board of Directors still retain possession of the road property in the States of Illinois and Indiana; and indeed the Superior Court in this city to-day granted an injunction restraining J. K. Edgerton, Esq., the Receiver appointed by the Federal Court in Ohio, from interfering with the company, its agents, or property in this State. The Board of Directors are informed by the most eminent counsel in Ohio, that the appointment of Receiver as to the property in that State is void. The Board is also assured that the order of the District Court at Pittsburg, appointing a Sequestrator, can be set aside.

I would also assure the friends of the company, and the patrons of the road, that every effort will be made, and I doubt not with entire success, to so conduct the business of the road as to merit, and secure the large traffic that such an important and advantageously located road ought to command; and which will result in ample revenues to enable the company, in good times, to discharge all the liabilities.

C. W. CASS, *Pres't pro tem.*

NEW METHOD OF REPAIRING RAILROAD IRON—The Great Western Railway Company has introduced a new system of repairing damaged and worn-out railroad iron in its shops at Hamilton, Canada. The mode of accomplishing this is simple, and is said to be very successful. The Hamilton Spectator describes the process as somewhat as follows:

"A rail which is damaged at the end by the peeling off a portion of it, or the spreading consequent on hard work, can have a new piece put in in a very short time, and that, too, in such a manner that the rail is better, and will stand more wear and tear, than when new. The rail is heated to a white heat, and a piece of common bar iron welded into the damaged spot, and the rail is as good as new. This operation may be performed to a greater or less extent, as the case may be; some of the rails we saw would only require one foot of new iron, while others would require as much as seven feet. The great advantage of this system over that of re-rolling is its cheapness.—Messrs. Dunning & Wormly, the contractors for this work, say that they can repair these rails at a cost of \$6 per ton, while to re-roll them would cost \$30, besides the expense of transportation and duties if they were done in the United States."

AN INTERESTING LETTER

From the President of the Pennsylvania Central, on the Pittsburgh, Ft. Wayne and Chicago Imbroglio.

The following letter from Mr. THOMSON will be read with interest at this juncture:

OFFICE OF THE PENNSYLVANIA R. R. CO., }
Philadelphia, Dec. 24, 1859. }

To the Editor of the Philadelphia Evening Journal:

Your money article of yesterday contained a reference to the connection between the Pennsylvania and the Pittsburgh, Fort Wayne and Chicago Railroads, which seems to convey the impression that this company will lose by the embarrassments of the latter company. The subscription of the Pennsylvania Railroad Company to the original companies forming (in part) that line, including stock dividends received, and 20 per cent. premium on the Ohio and Pennsylvania Railroad stock (paid to its stockholders under the articles of consolidation into the Pittsburgh, Fort Wayne and Chicago Railroad Company,) now amounts to \$816,050. This investment has not paid direct dividends for several years, and will not probably yield any profits for some four or five years longer. But for all aid rendered to that company in furnishing iron to complete the road to Chicago, the Pennsylvania Railroad Company is amply secured.

The receipts of the Pittsburgh, Fort Wayne and Chicago Railroad Company at this time are more than 250 per cent. greater per mile of road than those of the Harrisburgh and Lancaster Railroad Company (now in so flourishing a condition) were before the commencement of the Pennsylvania Railroad. With the development of the resources of the country traversed and the revival of the trade, we may reasonably expect similar results for the stockholders of the Pittsburgh, Fort Wayne and Chicago Railroad Company, when the price of its shares will be fully re-established in the market.

The embarrassments of the Pittsburgh, Fort Wayne and Chicago Railroad Company are not of a vital character. They are troublesome to arrange, in consequence of the number of mortgages that cover the different portions of the road; but these, happily, can be reduced to two classes, without a sacrifice of any portion of the full security now held by the bondholder. It is only necessary that the relative value of these mortgage securities should be fully understood by their holders to bring about a settlement satisfactory to all parties.

In a recent interview with the bondholders at New York every disposition was manifested that the company could desire in favor of an arrangement that would place it financially in a comparatively easy condition. At the request of a committee of these bondholders a special meeting of the Board of Directors of the Pennsylvania, Fort Wayne and Chicago Railroad Company will be held in Philadelphia on the 28th instant (instead of the 5th of January at Pittsburgh,) to confer with them in relation to an early adjustment of the existing conflict of authority in the management of the road and to the reorganization of its indebtedness.

The condition of the Pennsylvania Railroad Company was never more promising than at present. Of the four great trunk lines, it is the only one that will show, at the close of its financial year, an increase of revenue over that of the previous year. Its tonnage during the same time has been largely augmented; and

its surplus revenue, after paying regular dividends to its stockholders, are sufficient to wipe out all advances to the Pittsburgh, Fort Wayne and Chicago Railroad Company: for these, however, it holds about one million of the bonds of that Company as security.

Yours, very respectfully,

J. EDGAR THOMPSON.

HEAVY DAMAGES AGAINST A RAILROAD COMPANY.—A verdict of \$10,000 was rendered in a Philadelphia Court last week, in the case of O'Donnell *vs.* the Reading Railroad Company. Plaintiff took a seat in the cars and tendered the conductor a \$3 bill in payment of his fare, which was pronounced counterfeit. He borrowed the amount of his fare from a friend and paid it, but was notwithstanding ejected from the cars, and compelled to walk home some distance in a snow-storm, keeping him from his business. These facts were admitted, but it was urged that O'Donnell had been violent and abusive to the conductor, disturbing the passengers and rendering his expulsion a duty. This is an important verdict, as showing how far officers of railroad trains may go.

CONDITION OF THE LAND GRANT RAILROADS OF MINNESOTA.

The Governor of Minnesota, in a message to the Legislature, furnishes some interesting items of a financial character. He says there have been issued in various railroads \$2,275,000 of the bonds of the State, as follows.

Minnesota and Pacific Company.....	\$600,000
Minneapolis and Cedar Valley.....	600,000
Transit.....	500,000
Southern Minnesota.....	575,000

Of each of these roads there have been graded merely from 38 to 70 miles. Respecting these roads which have defaulted in the payment of interest, the Governor states:

I have deferred giving the notices of foreclosure contemplated by the law, until three of the companies, to wit: The Minnesota and Pacific Company, the Minneapolis and Cedar Valley Company, and Transit Company, have actually made default in the payment of the interest on the State Bonds severally issued to them, due on the 1st of the present month, before addressing such notices to the Trustees of the companies in default. Inasmuch as there is now no power conferred upon any of the State officers to bid in, for the State, the property and franchises of such of the Railroad Companies as have failed to make payment of the interest due upon the bonds issued to them, I recommend that an act be passed as soon as practicable, giving authority of the Governor, or other State officer, to purchase the property of any such company as may be sold under a foreclosure of the mortgage or trust deed. Such a measure is indispensable to prevent the securities held by the State from passing into the hands of third persons for an inconsiderable sum, and which might result in trouble and litigation, and, it may be, serious loss.

The Minneapolis and Cedar Valley road have filed a waiver of its rights under the decision of the Supreme Court, and accepted the terms originally offered by the Governor, namely, that the State bonds shall be a first mortgage on the road. The Southern Company will issue but \$2,000,000 first mortgage bonds, of which \$1,250,000 go to the State, and the Transit Company has agreed to limit its issue of first bonds to \$1,860,000 until 62 miles of road shall be built and equipped, and to \$30,000 per mile as such additional mile shall be built.—These companies have also agreed to accept, respectively, \$625,000 of State aid, the residue

of equal amount, to be furnished as the roads progress. The Governor thinks there is no good reason why these bonds are not now worth as much as other State stocks, although he does not recommend the imposition of an immediate tax for the payment of interest. The most that can be expected, he says, is that the State shall recognize their liabilities and willingness to pay whenever in condition to do so. The message concludes with the expression of the hope that the State may be able to take up all these bonds at a low rate, and giving for them others of a more specific character.

PRESIDENTS MESSAGE.

The President thus summarily disposes of the great question of a Railroad to the Pacific.

I would again express a most decided opinion in favor of the construction of a Pacific Railroad, for the reasons stated in my two last annual messages. When I reflect upon what would be the defenceless condition of our States and Territories west of the Rocky Mountains in case of a war with a naval power sufficiently strong to interrupt all intercourse with them by the routes across the Isthmus, I am still more convinced than ever of the vast importance of this railroad. I have never doubted the constitutional competency of Congress to provide for its construction, but this exclusively under the war-making power. Besides, the Constitution expressly requires, as an imperative duty, that the United States shall protect each of them (the States) against invasion. I am at a loss to conceive how this protection can be afforded to California and Oregon against such a naval power by any other means. I repeat the opinion contained in my last annual message, that it would be inexpedient for the Government to undertake this great work by agents of its own appointment and under its direct and exclusive control. This would increase the patronage of the Executive to a dangerous extent, and would foster a system of jobbing and corruption which no vigilance on the part of Federal official could prevent. The construction of this road ought, therefore, to be intrusted to incorporated companies, or other agencies, who would exercise that active and vigilant supervision over it which can be inspired alone by a sense of corporate and individual interest. I venture to assert that the additional cost of transporting troops, munitions of war, and necessary supplies for the army across the vast intervening plains to our possessions on the Pacific coast would be greater in such a war than the whole amount required to construct the road. And yet this resort would, after all, be inadequate for their defense and protection.

SOUTH CAROLINA LEGISLATURE.

THE BLUE RIDGE RAILROAD.—The scheme to aid this great enterprise, by a State subscription of \$1,000,000 for the road as far as Clayton, failed in the House. A new proposition, to subscribe \$310,000 towards the building of the road as far as Walhalla, was then brought before the Senate and, after a stout struggle, was passed and sent to the House, with an amendment attached to it by Mr. MAZUCK, which made the relief provided by the bill in a great measure nugatory, inasmuch as it required all the outstanding subscriptions to be paid in, or the subscribers to be reduced to insolvency before the State subscription could be

drawn from the treasury. This restriction was removed by the House, and an amendment substituted for it, simply declaring that it was not intended by the Legislature to exempt defaulting subscribers from paying up their subscriptions, or the company from exacting payment of them. In this form the bill returned to the Senate. Mr. DANTZLER afterwards submitted a resolution, which also was passed, limiting the appropriation of this fund, and of other funds in the Company's possession at this time, towards completing the road as far as Wallahalla, the work beyond not to be interfered with if other subscriptions for its further prosecution could be obtained. These restrictions bind the Company to do what it would, under the law of its charter, have done without them, and met with no opposition from the friends of the bill. The aid thus given by the Legislature may, therefore, be considered as given directly to the enterprise. It is also plain that the Company have gained something, and it has only to go on adding to its claims to public confidence to command hereafter all the legislative patronage it deserves in working its way through the mountains. It has gained many friends of late, and will get many more when it next comes up before the Legislature. For notwithstanding all that has been written and said upon the subject, it is strange how little its beneficent character is understood in the Parishes, and how it has been beset by injurious alliances among others in sundry parts of the State. The Blue Ridge Railroad will, therefore, we are assured, be built. Let all cavillers cease to doubt on this point.—*Charleston Mercury*.

CHARLESTON AND SAVANNAH RAILROAD.—The editor of the *Walterboro' Sun*, who has lately passed over the Charleston and Savannah Railroad, thus writes about it:

The track on this road is in a splendid condition, owing as much to the dry fall and winter, as to the labor constantly expended on it. We were glad to notice the numerous buildings recently erected along the line of the road, as a sign of thrift among the people. The old foggy notion that a white man cannot live in that section, will be laid aside, now that inducements are offered the whites to settle there. It will not be many years ere there will be numbers of small farms along the line, which will help to supply the citizens of Charleston with vegetables, poultry and meats; and even our planters will soon find it to their interest to raise stock, etc., for market. They have heretofore had no facilities for such articles to a market, and consequently have paid no attention to so trifling a matter. But it is no longer trifling, and will increase.

THE ATLANTA ROLLING MILL.—Messrs. Blake, Scofield and Markham are the proprietors and operators of the Atlanta (Ga.) Rolling Mill. A correspondent of the Albany (Ga.) *Patriot* furnishes the following relative to their enterprise:

Their business is the re-rolling of worn out railroad iron. Capital invested, 125,000—They employ 130 hands, and work night and day. They burn 32 tons of coal per day, costing \$5 per ton. They roll 30 tons of iron per day, which pays \$30 per ton. They pay Mark A. Cooper for new iron for working with old rails, about \$2,500 per month. They pay hands every two weeks from one thousand eight hundred to two thousand five hundred. The power used is two engines, one of one hundred horse power and the other of twenty-four horse power.

OPENING OF THE LOGANSPOET, PEORIA AND BURLINGTON RAILROAD.—The opening of this road has been delayed somewhat during the past week, by the fact that the half mile of unfinished track had been taken possession of by a party of laborers, who refused to make the connection unless several thousand dollars due them was previously paid. The *Lafayette Courier* says that on Saturday an amicable adjustment of the difficulties was effected, and the road completed. A locomotive ran out to the State line and back on Saturday, and a through train was to have been started on Monday.

The assignment recently made by the Racine and Mississippi Railroad, has been set aside by the Wisconsin Court as fraudulent, and a receiver appointed. Lucius G. Fisher, of Beloit, is the Receiver.

MONETARY AND COMMERCIAL.

The past week has exhibited in the money market all the close features of the preceding one. Money has been exceedingly close and the discount houses have been able to do but little for the accommodation of their customers. The indications, however, are fair for an improvement. Money is circulating freely in the country in payment for hogs and produce. This stream, flowing from all the large commercial marts, enables the farmer to pay his balance to the small dealer, and he in return pays the merchant. The improvement in this respect will, we think, be very decided during the course of the next sixty days. The rates rule as heretofore—regular transactions 10 to 12 per cent.; outside rates 12 to 18 and 24 per cent.

The Holiday season has brought in a class of trade from the country which has kept some of the jobbing houses quite lively during the week. As the first of January approaches, active preparations are making for yearly settlements.

Eastern Exchange has advanced during the week to $\frac{1}{2}$ prem. selling, $\frac{1}{2}$ buying. Some transactions have taken place at 4-10. New Orleans exchange is scarce. Gold is quoted at $\frac{1}{2}$ premium. Supply light.

The market for stocks has been very limited. Speculation preferring the usual mercantile channels to securities.

At the East we notice a dull market for money and some depression in securities. Toward the close of the week, however, greater firmness prevailed and better prices were realized in some of the favorite stocks.

Out of thirty-one Banks in New York which usually pay their dividends in January and July, twenty-eight have already declared dividends varying from $3\frac{1}{2}$ to 6 per cent. It is probable the other three will report in a few days.

SEVENTH MONTHLY REPORT OF WM. KEY BOND, RECEIVER OF THE C. & Z. R. R. Co.—Wm. Key Bond, Receiver of the Cincinnati, Wilmington and Zanesville Railroad Company, filed his seventh monthly report in the Clerk's office of the U. S. Circuit Court Monday:

GROSS EARNINGS IN NOVEMBER.

Passenger Business, Through	\$ 100 12
" " Local	4,617 45
" " Express, etc.	401 45
" " Mail	828 10
Total	\$5,947 12
Freight	Through.....\$ 336 96
" " Local	9,200 87
Total	\$9,539 83
Total gross earnings	\$15,486 95

EXPENDITURES.

Operating, repairing and improving expenses	\$10,676 20
Extraordinary Expenses	1,171 60
Capital Expenses	646 57
Total	\$12,494 37

Cash receipts from all sources in November	\$14,626 16
Disbursements during November	14,252 12
Debts and liabilities contracted by W. K. Bond, Receiver, remaining uncollected on 30th November	\$27,309 12
Liabilities and debts due to the road which have accrued during W. K. Bond's Receivership, and remaining unpaid Nov. 30th	\$8,405 93

The earnings of the New York Central Railroad for November, 1859, were.....\$632,406 42
1858.....609,919 81

Increase.....\$51,486 61

The following is the comparative earnings of the Catawissa Railroad Company:

	1858.	1859.
October—Gross earnings	\$20,779 92	\$40,396 13
Less paid connect'g r'ds.	5,613 28	5,468 52
	\$25,264 68	\$23,027 56
November—Gross earnings	\$29,465 16	\$32,185 18
Less paid connecting roads	5,108 64	5,065 24
	24,326 42	26,519 94

Increase of November, 1859, over the same month, 1858, \$2,193 52.

The earnings of the Ohio and Mississippi Railroad for the month of November, 1859, were:

Passengers, etc.	\$157,013 44
1858	129,988 49

Increase.....\$27,024 95

The earnings of the Hannibal and St. Joseph Railroad for November, were \$81,309 68.

The business of the Indianapolis and Cincinnati Railroad for November is very satisfactory. The figures are as follows, viz:

Passengers	\$14,137 68
Freight	28,201 55
Mail	9 50
Express	520 00

Total	\$43,674 23
November, 1858	37,738 82

Increase.....\$5,935 41

The November earnings of the Stonington Road were as follows:

Passengers	\$11,157
Freight	8,837

Total.....\$19,994

The receipts of the Mississippi and Tennessee Railroad for 1858 and 1859, were as follows:

	1858.	1859.
Total receipts	\$23,880 25	\$33,091 04
Operating expenses	5,693 57	7,380 02
Net receipts	\$18,186 84	\$25,711 02
	18,186 82	

Increase.....\$7,524 18

The number of bales of cotton transported in 1858 was 10,739; in 1859, 16,282; showing an increase of 5,543 bales.

The earnings of the Central Railroad Company of New Jersey for the month of—

November, 1859, were	\$87,344 80
November, 1858	72,982 75

Increase, 20 per cent.....\$14,362 45

Annexed is the official statement of the Buffalo and State Line Railroad Company:

EARNINGS.

	1858.	November. 1859.
From passengers	\$6,565 29	\$5,181 05
From Freight	49,383 20	45,085 49
From other sources	1,236 32	1,471 00
Total	\$87,234 81	\$82,337 54
Total decrease		\$4,397 27

EXPENSES.

Construction	\$2,847 85	
Maintaining road	17,313 76	\$15,900 42
Repairs machinery	4,160 92	4,530 82
Operating	17,103 27	13,409 20
Total	\$41,415 81	\$33,840 44
Total Decrease		\$2,148 47

The earnings of the Pacific Railroad for November, 1858 and 1859, were:

	1858.	1859.
Passengers	\$38 021 83	\$24,228 51
Freight	25,083 51	32,063 69
Mails	2,037 50	2,100 00
	\$55,152 84	\$58,992 20
Increase in 1859		\$3,839 36

SOUTHWEST BRANCH.

Passengers	\$585 62
Freight	851 25
	\$1,436 87

ILLINOIS SOUTHERN RAILROAD.—Our readers will be gratified to learn that the people of Vincennes, have at last been aroused to the importance of securing the northern terminus of the Illinois Southern Railroad at their City. The Directors at Vincennes are actively engaged in securing stock, and it was confidently believed that by Tuesday, they would have sufficient available means to warrant the company in commencing the location of the line in the direction of Vincennes. It is a matter of gratulation that the road goes to Vincennes. That is the natural terminus, and whilst this was the feeling of Judge Wilkinson, his policy was to terminate the road at the point that afforded the most material aid. The apathy on the part of the citizens of Vincennes rendered it probable that Lawrenceville would be the terminus. Their recent prompt and efficient action, however, secures to them the road. —*Mt. Carmel (Ill.) Register.*

RARITAN AND DELAWARE BAY RAILROAD.—The Ocean, N. J., *Emblem* says that the Raritan and Delaware Bay Railroad is located through that county, and ready to be let out to contractors. The location is about five miles west of Tom's River. For the first section, extending from the Camden and Atlantic road, shares amounting to \$500,000 have been issued. It is hoped by the people of Ocean that the road will speedily be completed from Keyport to the Camden and Atlantic road.

HANNIBAL AND ST. JOSEPH RAILROAD.—The annual report of the Directors of this road has just been published, giving detailed statements of its condition and business, from which we quote the following:

Construction account on the 1st September was.....	\$11,102,326
Exclusive of unsettled claims, etc., estimated at.....	67,000
In addition to which there will be required in the coming year an expenditure for construction account.....	79,000

Making a total of.....	\$11,248,326
Applicable to the reduction of which the Company have 601,329.39 acres of land, estimated at \$12 per acre.....	7,215,952

The liabilities of the Company are:

Missouri State Bonds.....	\$3,000,000
Land Mortgage Bonds.....	5,000,000
Convertible Bonds.....	757,000
Plain Bonds.....	11,600
Full paid Stock, 16,029 shares.....	1,602,900
Partially paid stock, 2,973 shares.....	167,712
Bills payable.....	564,214
Outstanding Liabilities in Missouri.....	67,000

Total.....	\$11,169,826
The gross earnings from November 12, 1858, to September 1, 1859, were:	

From Passengers.....	\$254,640
" Freight.....	174,536
" Mail and Miscellaneous.....	20,101

Total.....	\$449,277
Operating Expenses.....	216,965

Excess of Earnings.....	\$232,312
The amount of land sales to November 1, 1859, is:	
14,131 acres, at an average of \$10 24 per acre, or \$144,707	

KNIGHTSTOWN AND SHELBYVILLE RAILROAD.—The Indiana Central and Jeffersonville companies propose to unite in the re-construction of the road from Knightstown to Shelbyville, to be operated by the two companies in the transportation of freights, chiefly between Louisville and the East. The route will be from Jeffersonville to Edinburg, over an arm of the Jeffersonville line to Shelbyville, where the Indianapolis and Cincinnati road is crossed, and from thence to Knightstown to the Indiana Central. The new route will save about half of the distance between Edinburg and Knightstown, which now has to be travelled through Indianapolis.

J. F. D. LANIER, Chas. Moran, and L. H. Meyer, were appointed on Monday last by the bondholders, a committee to confer with J. Edgar Tomson with reference to an adjustment of the pending difficulties between the mortgage creditors and the Pittsburg, Ft. Wayne and Chicago Railroad Company. They are to meet at Pittsburg on the 5th of January, to consider the matter. —*Western R. R. Gazette.*

The *Oquawka Plaindealer* says there is a report to the effect that the Chicago, Burlington and Quincy Railroad Company have purchased the Air Line Railway from Galva to New Boston, and that they intend to proceed with the work at once, and complete it in the earliest possible time; and also build a branch road from New Boston to East Burlington, to connect with their road on the west side of the river.

At the Meeting of stockholders of the New York Central Railroad Company, held on the 15th inst., the following persons were appointed to examine the accounts and transactions of the Company for the ensuing year: Charles Stebbins, Cavenovia; John P. Moore, New York; Morean Delano, New York; John T. Clark, Utica; Joel Rathbone, Albany; John Wilkinson, Syracuse, and Hugh Whits, Cohoes. At a meeting of the Directors, held in the afternoon, Erastus Corning was unanimously re-elected President, and Dean Richmond Vice-President of the Company. The old Board of Directors having been re-elected, the following standing Committees were appointed: Executive Committee—Messrs. Corning, Richmond, Schoolcraft Page and Chedell. Committee on Accounts—Messrs. Townsend, Sparker and Tracy. The Board declared a dividend of 3 per cent. for six months, which will expire on the 31st day of January next, payable 20th February.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned
THEODORE DEHON,
no13 10 Wal ar Broadway, New Yor

NOTICE TO CONTRACTORS.

Office of the Little Rock and Fort Smith
Branch of the Cairo and Fulton Railroad Co., Van Buren, Ark., Sep. 10, '59.

SEALED PROPOSALS for the graduation of the First Division of twenty miles eastward from Van Buren, will be received at this office until **Thursday noon, December 1st, 1859.** The work is divided into twenty sections of about one mile each, and proposals for either a part, or the whole of this Division may be made; but no bids for less than one section will be considered. Blank forms of proposals will be furnished on application at this office, by mail or otherwise. Estimates of work done will be made on the first day of every alternate month, and payments made on the first day of the month following; and fifteen per cent. of all estimates will be retained until the completion of the contract. Contractors desiring other terms of payment may bid accordingly, as the above terms are not positively settled.

The Company having a large amount of the finest Lands in Western Arkansas, will give preference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications may be seen, and all desired information obtained, upon application at the Engineer's Office, in Van Buren.

JESSE TURNER, President.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
No. 67 West 6th St. bet. Walnut & Vine
CINCINNATI O

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANA OR SANDOVAL

FOR

Decatur,	Springfield,
Bloomington,	Peoria,
Burlington,	Quincy,
La Salle,	Rock Island,
Dixon,	Galena,
Prairie du Chien,	St Paul, and
St. Anthony,	

And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANA for all the above points. Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all

TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

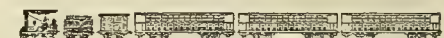
E. H. NICHOLS,

Gen'l Southern Agent, Cincinnati.

W. P. JOHNSON,
Gen'l Passenger Agent, Chicago.

Winter Arrangement, 1859-'60.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the

West, South-West and North-West.

TWO TRAINS

Leave Wheeling daily at 12:35 P. M., and 10:10 P. M.

One Train leaves Parkersburg daily at 9:20 P. M.

Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.

Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2.

Time as quick and Fare as low as by any other ROUTE.

Inquire for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

E. F. FULLER,

General Western Agent.

L. M. COLE,

General Ticket Agent.

W. P. SMITH, Master Transportation.

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circular which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the retort is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet,.....	\$300 00
do do do 350 " " " " " " " " " "	335 00
do do do 400 " " " " " " " " " "	375 00
do do do 500 " " " " " " " " " "	450 00
do do do 600 " " " " " " " " " "	525 00
do do do 700 " " " " " " " " " "	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, as now in operation in several States, apply to

R. T. COVERDALE,

167 Walnut Street, Cincinnati, Ohio,

who has the exclusive right to manufacture and sell in the State of Ohio.

Feb. 24th, 1859.

APPLEGATE & CO.,
Booksellers, Publishers, Stationers & Blank
Book Manufacturers,
43 Main St. Cincinnati O.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Booksellers, Country merchants, and others to extensive stock of, Theological, Standard, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the principal manufacturers of Paper and Stationery, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

BOOKSELLERS,

Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, Envelope, Manilla paper; Bonnet, Opes, Gold & steel pens, Pencils, Pen-presses, and Inkstands; Eraser, Wax, Wafer, Banker's cases, head boxes, Envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files; Date Calendars, together with all other articles used in the counting-house.

Stationers,

To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly paged, including all sizes, from the small memorandum to the large Super-Royal Ledger, and variety of styles workmanship, order of any design, with or without ruling and durability of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

BLANK BOOK MANUFACTURERS,

We are prepared to Print and Bind books of any description, and in any style desired, at rates as low as quality of work cut in this where. Our executing these the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Cards, Circulars, or other of printing, will that we do such jobs despatch. Orders re-

Stereotype, of any description that may be desired as the same can be executed or else facilities for branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Cards, Circulars, or other of printing, will that we do such jobs despatch. Orders re-

Publishers

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, *Clark's Compendium*, *Rollin's Ancient History*, *Plutarch's Lives*, *Josephus*, *Spectator*, *Chain of Sacred Wonders*, *Familiar Science*, *Webb's Monitor*, *Soden's German*, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

43 MAIN STREET, CIN.

W. HARVEY'S SAFETY JOINT

For Coupling the Ends of "T" Rail
PATENTED, NOV. 2, 1858.

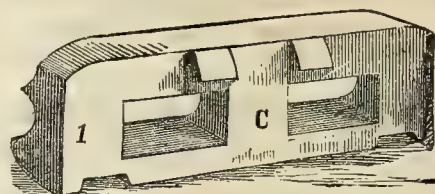


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

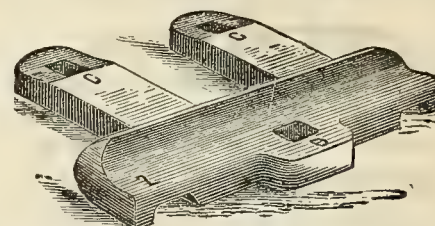
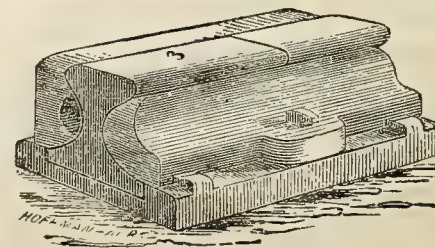


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that one part assists and takes the strain of the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly afeer road, thereby doing away with the breaking of rails, wheels and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear, the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
41 Jefferson-street, Albany, N. Y.
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SOLE IMPORTERS
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DENSERS for high pressure steam, with sea or
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WITH OR WITHOUT AXLES.

WHEELS FITTED
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For Post-Masters and Business Men.

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and Territories, arranged by State and Counties; A
Complete List of all Distributing Post-Offices; Rates
of Foreign and Domestic Letter Postage; Rates of
Printed Matter, Transient and Regular; Abstract
of the Laws and Regulations of the Post-Office De-
partment, &c., &c.

COMPILED BY E. PENROSE JONES,
Late Assistant Post-Master at Cincinnati.

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READ THE FOLLOWING CERTIFICATE.

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January, 1859.
This work has been carefully compiled and corrected by
E. PENROSE JONES, Esq., late Assistant Post-Master of the
Cincinnati P. O., from the Records in this Department, and
other sources, and contains the most complete list of Post-
Offices, especially of the Western, North-Western, and
South-Western States, yet published.

MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an active pamphlet of about 100 pages.
The entire matter is kept standing in type, and the com-
piler is promptly advised of all New Offices, Changes and
Regulations of the Department, the information is corrected
up to the last day of publication, an advantage possessed
by no other work of the kind.

OBSERVE, That this list is arranged by States and Coun-
ties, making it especially valuable to business men. No
similar arrangement has been published since 1836. There
are 3600 more offices in this than in any book heretofore
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Copies for \$2 00.

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Mar10.16

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W. M. SUMNER & CO., cor. Fourth and Wal-
nut Streets, second floor, Cincinnati, Ohio.

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We offer the Wheeler & Wilson Sewing Machine, with
important improvements, at a reduction on former prices;
and to meet the demand for a good, LOW-PRICED FAMILY
MACHINE, have introduced a new style, working upon the
same principle, and making the same stitch, though not so
highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALIKE on
both sides, impossible to unravel, and leaving no chain or
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Send or call for a circular, containing all particu-
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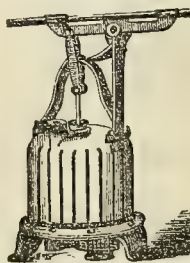
1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th
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low by
TRABER & AUBERY,
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SUCTION & FORCE PUMP
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Compound Steam Pumping Engine,



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the attention of RAILROAD
Companies, Manufacturer
Distillers, Miners, and the pub-
lic generally to these Pumps,
as the best Pump now in use
and acknowledged by all who
have used them to be perfect-
are simple in their construc-
tion, compact, durable and not
likely to get out of order; well
adapted for Steamboats, Rail-
road Water Stations, Distill-
ries, Breweries, Furnaces,
Mills, Factories, Wells, Cla-
terns, Stationary Fire Engines, Garden Engines and
all purposes where a Pump can be used. Also, for
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rapidly.

Also, McGowan's Patent Ball Valve Pump, designed
for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings
Lead, Copper and Gas Pipe furnished at the westma-
kel prices.

Full and perfect satisfaction guaranteed in all cases,
when properly put up according to directions.
Orders thankfully received and promptly filled at the
shortest notice.

SILVER MEDAL. (The highest prize) awarded
esse pumps and Steam Pumping Engine at the Late Pa-
Ohio Mechanics' Institute. June 18, 1855—1

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co.,
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other Rails on terms favorable to parties wanting to pur-
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FREEDOM IRON COMPANY,

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods,

Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't.

This Iron is all made from best Juniata cold-blast char-
coal Pig Iron, refined with Charcoal in the old-fashioned
Forge Fire, hammered into a Bloom from which Iron is
hammered. The whole operation from ore to finished Iron
is conducted at our own Works June 9.

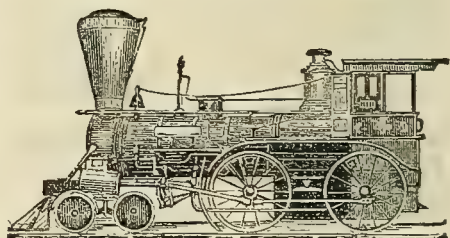
New Time Table

OF THE

NEW YORK CENTRAL R. R.

	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp.	7 00 A. M.	7 00 P. M.	7 00 P. M.
Mail	9 00 A. M.	12 50 A. M.	
New York Exp.	11 15 A. M.	9 00 P. M.	9 00 P. M.
Night Exp.	5 00 P. M.	4 00 A. M.	4 00 A. M.
Utica Accom'n.	6 00 P. M.	Ar. U. 10 00 P. M.	
N. Y. Mail	11 15 P. M.	10 00 A. M.	10 00 A. M.
	Leave Buffalo.	Leave Bridge.	Ar. Alb'y
New York Exp.	5 15 A. M.	5 15 A. M.	3 30 P. M.
Steamboat Exp.	8 00 A. M.	8 00 A. M.	8 00 P. M.
Mail			2 30 P. M.
Cleveland Exp.	6 00 P. M.	6 00 P. M.	4 40 A. M.
Cincinnati Exp.	11 00 P. M.	11 00 P. M.	8 30 A. M.
Utica Accom'n.			10 00 A. M.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive
equal in efficiency and durability to the best Eastern
manufacture. Also, Shaping and Slotting Machines
suitable for railroad shops. Also, all kinds of heavy
forging and casting done at short notice. Also, bolts for
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ap 20 MOORE & RICHARDSON.

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Franklin Springs, Ky.," or the undersigned.

P. DUDLEY,
President of the Board,
Jan 5th.

The Railroad Record.

E. D. MANSFIELD,
T. WRIGHTSON, } Editors.

CINCINNATI:

Thursday Morning, Jan. 5, 1860.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

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One square, single insertion,.....	\$1 00
" " per month,.....	3 00
" " six months,.....	12 00
" " per annum,.....	20 00
" column, single insertion,.....	5 00
" " per month,.....	10 00
" " six months,.....	40 00
" " per annum,.....	80 00
" page, single insertion,.....	15 00
" " per month,.....	25 00
" " six months,.....	110 00
" " per annum,.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

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If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

If The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

THE ETNA INSURANCE COMPANY.

This powerful and prosperous company has made another "great dividend." It divides half a million of dollars in stock to its stockholders, giving one share of stock for every two of its present one million of dollars capital. It now has a capital of one and a half millions of dollars, and also a surplus or "re-insured fund," of half a million of dollars, making securities in cash of two millions of dollars. In January, they will probably make also a cash dividend of ten per cent on the old stock at least. The prosperity of this company is unexampled. We believe it commenced with a capital of \$200,000, and within three years it has carried, by its own earnings, its capital from \$500,000 to \$1,500,000—making its stockholders rich—every share now being worth over \$200. For instance, \$5,000 invested in that company three years ago, at the market price of its stock, is now worth 30,000 cash, and quick at that—and it has received an average of over 20 percent yearly dividends besides! Where is there an equal?—*Hartford Times*.

The following are the officers of the Buffalo, New York and Erie Railroad for the current year:

A. D. PATCHIN, *President*.

ISAAC C. COLTON, *Assistant President*.

GILBERT CAMERON, *Treasurer*.

PROGRESS OF RAILROADS AND THEIR EFFECTS ON PROPERTY.

In our last we endeavored to give, as accurately as possible, the aggregate of Railroads now (January, 1860,) in operation. This is 27,500 miles. Let us now look a little into the rate of progress, and the effects, so far as we can ascertain them, on the value of property. Taking the whole United States we have this progress in periods of five years each:

In 1828.....	3 miles.	
In 1833.....	576 "	
In 1838.....	1,843 "	
In 1843.....	4,174 "	125 percent. increase.
In 1848.....	5,682 "	35 " "
In 1853.....	13,379 "	136 " "
In 1858.....	26,449 "	110 " "
In 1859.....	27,500 "	

It thus appears that from 1853 to 1859, there were more miles of Railroad constructed, than were in *twenty years previous*. In this period, there were two periods of financial revulsions, each of which caused a crash in railroad affairs, viz., in 1854 and 1857. Notwithstanding this, such was the demand for Railroads, especially in the West and South-west, that the number of miles of road constructed in any one year, is very nearly as great as it was in the very flood tide of the Railroad Fever. The direction in which this progress has been chiefly made, may be seen, by the following brief comparative table:

	1850.	1853.
New York.....	1,890 miles.	2,700 miles.
Ohio.....	635 "	3,000 "
Illinois.....	131 "	2,748 "
Indiana.....	287 "	1,900 "
Tennessee.....	73 "	750 "
Alabama.....	254 "	485 "
Missouri.....	—	646 "
Wisconsin.....	—	850 "
Iowa.....	—	250 "
Michigan.....	321 "	609 "

Aggregate..... 3,591 miles. 13,998 miles.

The increase in these ten States, in ten years, is 10,400 miles. Nearly all of this is since 1852, deducting New York, 9,500 miles for nine Western States. We here repeat the observation in our last number, that notwithstanding all adverse circumstances, there are nine Western States in which nine thousand miles of railroad will be made in the next nine years.

The next and most interesting question is—does this pay? Passing by entirely those engaged in the construction of any particular road, does the expenditure of this vast sum of money, in this way, repay the community in which it is invested? This question is easily answered, by the experience of Ohio. In 1846, a new appraisalment of property took place in this State, which placed property very nearly on its true cash value. In 1847, this appraisalment took effect, and in 1848 and 1859, we have these results:

Valuation of Ohio in 1848.....	\$421,067,236
" " 1859.....	900,000,000

The value of property in the whole State was *doubled in eleven years*. Undoubtedly this was not all due to railroads; for the State increased in that time nearly half a million

in population, and, of course, added proportionably to its improvements. On the other hand, that the Railroads have produced a large part of this improvement can not be doubted. In 1835, Ohio had finished her Canals, and from that time till 1845, they produced their full effect. In 1843, the first railroad was begun, and in 1850, the State had 650 miles complete; but in 1859, she had over 3,000 miles. From 1850 to 1859, then was, for this State, the great Railroad period. In this period the property of the State rose four hundred millions of dollars in value. We make no mistake, then, in saying, that these roads have added immensely to the value of property.

We have examined the valuation of property in a large number of counties, and find that the increase in those having railroads is *doubled* the increase in those which have no railroads; thus proving conclusively that a large part of the increase in the State is due to railroads only.

If now, we examine the relative effect of the capital employed on one hand, and of the increase of capital, we find the following result:

Increase of Capital.....\$450,000,000

Cost of Roads.....\$110,000,000

The cost of the roads has been just *one-fourth* the increased capital of the State. If, then, the entire cost of the roads was thrown away, the State has still acquired *three hundred millions* in the short space of ten years! But, it is not supposable that this sum is thrown away. The *net profits* made by the roads will pay 7 per cent interest (which we may call *par*,) or full two-thirds the entire cost. We may safely say, that forty millions is all that *can* be lost by railroads of Ohio, while two years benefit of the roads to farmers alone, will pay the whole sum.

In view of the facts we have stated, in our last number and in this, we think three things are proven:

1st. That railroads are of such indispensable value to lands, especially in the new States, that they must and will be made.

2d. And that, when made, they add greatly to the value of property; so much so, that in looking to the aggregate community, any losses accruing to stockholders or creditors, are tenfold made up by the general increase of value.

3d. That the commerce of a State is equally increased—indeed, can not be carried on, without the aid of this new machinery.

4th. And that, as the inevitable sequence to these facts, all new States and cities will have them. The sacrifices that are made are temporary; but, the benefits are permanent. Since, however, there are sacrifices to be made, we think that in the new States, and indeed the old ones, where few roads are made, the STATE AND plan, adopted by Tennessee, is far the best, for the sacrifices are not near so great, and are more easily borne. The State of Tennessee loans \$10,000 per mile for railroads, and a large sum for each bridge over a considerable stream. This aid judiciously applied, will in-

sure the construction of roads, wherever the community thinks they are needed. Every community can raise some means, and has some credit, and these united with the State Aid, are sufficient for roads where utility can be clearly shown.

On the grounds we have exhibited, we think the construction of railroads will go on quite as fast as they do for many years to come. In the view of these facts all persons should keep themselves well informed on the condition of Roads, the new Schemes, the new Improvements, and the rates of Stocks.

TERRE HAUTE & RICHMOND R. R.

ELEVENTH ANNUAL REPORT.

The business operations and the financial condition of the Company are fully set forth in the Secretary's Report, and accompanying statements.

Although the revenue of the Company has been somewhat less than that of the previous year, the expenditures have been correspondingly reduced; consequently, the net earnings vary but little from those of the preceding year. The business of the road, in tonnage, equals that of 1858. There has been a large increase in the tonnage of "first," "second," and "third" class freights, as there has also been an increase in the tonnage of the principal western staples, viz: wheat, flour, and corn. The decrease of revenue mostly arises from the low rates, that have ruled during the year for through freights, and to the delayed movement of an important item of our local traffic, the transportation of live hogs, which has seriously affected the revenue for November, (the last month of the fiscal year,) but which are now being transported, in the present month, December.

Owing to the scarcity of corn in 1858, hogs were sent early to market, and in November of that year, we transported seven hundred and twenty-six car loads, against ninety-one last November. The aggregate number of car loads of hogs transported in 1858, was two thousand one hundred and sixty-seven, and the aggregate number the past year was five hundred and twenty-five.

There has been an increase of eleven thousand six hundred and twenty-three thousand dollars and sixty-six cents, on "inward" or westward freights, and a falling off on "outward" or eastward freights, of twenty-two thousand and fifty-nine dollars and seventy seven cents. Had the large number of hogs, now being transported over the road, reached us a few weeks earlier, our receipts from outward freights would have been largely increased, and with better rates for the transportation of freights generally, the revenue would have been larger than that of 1858.

The damages sustained by the Terre Haute, Alton and St. Louis Railroad, our important connecting road on the West, by the freshets

at the beginning of the year, seriously affected the business of both roads. We are satisfied that the improved condition and now energetic management of that road, will tend to the increase of the business of both, the coming year.

Our revenue has also been somewhat decreased, in consequence of the State Fair being held the past year in the south part of the State, and remote from the counties tributary to the business of the road; had it been held as formerly, at Indianapolis, the capital of the State, our revenue would have been several thousand dollars more.

We have, in connection with the "Western Union Telegraph Company," erected at a cost to us of twelve hundred and seventeen dollars and eighty cents, a telegraph along the line of the road, which furnishes us all the facilities of this great agent in railway operations. The few weeks that it has been in operation, has fully demonstrated its utility in expediting the business of the road.

Jointly with the Louisville, New Albany and Chicago Railroad, there has been erected at the crossing of that road with ours, a freight and passenger depot, amply large to accommodate the increasing traffic between the two roads.

For the sum of ten thousand dollars, we have purchased about five acres of land adjoining the depot grounds at Terre Haute, where more room was required for additional tracks or sidings.

The relaying the road with new ties has been completed; one hundred tons new rails have been laid, and a new coat of ballasting put on the road bed. The stone masonry of all bridge abutments, wing-walls, culverts, and drains, have also been completed. We have also built two additional water stations, making the supply of water on the line of the road ample. A new side track has been laid at Staunton, for the accommodation of the coal business; also one at Greencastle, for the convenience of loading stock. The fencing has been thoroughly repaired, and is now more perfect than at any previous time. The machinery and rolling stock have been kept up, and is in perfect order. The trains have been run with regularity, and, as usual, we have been without accidents—no injury has been sustained by person or property. The officers and employees have discharged their several duties with promptness and fidelity.

By order of the Board,

E. J. PECK, *President.*

Terre Haute, Dec. 22, 1859.

SECRETARY'S REPORT.

TERRE HAUTE, Dec. 22, 1859.

The business of the Company for the year ending November 30, is shown in detail by the Statements hereunto annexed, viz:

- First—Statement of Earnings and Expenditures.
- Second—General Account showing the Aggregate Receipts and Payments for the year.
- Third—Account Current.
- Fourth—Balance of General Ledger.
- Fifth—Details of Earnings for the year.

During the year five thousand of the Company's Bonds have been surrendered, and Stock issued for the same—increasing the—

Capital Stock of the Company to.....\$1,381,450 00
And reducing the amount of bonds to..... 230,000 00

Aggregate of Stocks and Bonds.....\$1,611,450 00

The gross earnings of the year, as shown in Statement No. 1, is.....\$357,297 85

And the expenditures have been, viz:

Operating Expenses.....\$165,568 56
Additional .. 9,374 43
175,142 99

Net earnings.....\$182,154 86

Taxes.....\$7,645 67
Interest and Exchange..... 14,426 57
Dividend 1st six months.....\$64,829 50
" 2d six .. 69,072 50
137,895 00

Surplus Earnings.....22,167 62

Of which there has been expended, and not charged to current expenses of the year the sum of.....\$12,202 81

For the following purposes, viz:

Telegraph.....1,217 81
Real Estate.....10,000 00
Half Interest in Depot at Junction of New Albany Road..... 985 00
12,202 81

In Account with the Stockholders, (Statement No. 3.) is shown a credit balance of....\$186,278 02

Which amounts is represented by the following accounts, viz:

Evansville and Crawfordsville R. R. stock.....\$24,429 89
Madison and Indianapolis R. R. Income Bonds..... 1,610 00
Real Estate for Wood..... 2,601 10
Real Estate (1859)..... 10,000 00
Depot at Junction of New Albany R. R..... 985 00
Telegraph..... 1,217 80
Bills Receivable..... 79,914 62
Fuel—on hand..... 11,250 00
Material on hand..... 33,186 30
Railroad Iron on hand..... 4,100 00
U. S. Mail..... 7,850 17
Treasurer..... 78,838 90

\$53,973 78

Less balance unpaid dividends.....\$623 26

Less Dividend declared Dec. 21, 1859, payable Jan. 5, 1858.....60,072 50
60,695 76
\$186,278 02

By order of the Board of Directors, the account of the Atlantic and Mississippi Railroad Company, has been closed, add the amount charged to Profit and Loss. There has also been charged to same account, by order of the Board, and the Treasurer credited with the sum of \$2,393 52, being for losses sustained by the depreciation of funds held by him, mostly arising from losses on Indiana Free Bank paper, when the Banks were discredited in 1856.

CHAS. WOOD, *Secretary.*

The following are the Officers and Directors for 1859-'60:

E. J. Peck, *President and Sup't*; Charles Wood, *Secretary*; John Scott, *Treasurer*.

Directors—Chauncy Rose, James Farrington, Demas Deming, Terre Haute; W. H. Thornburg, Greencastle; E. J. Peck, Indianapolis; H. Ross, Chas. Wood, William K. Edwards, F. Nippert, Terre Haute.

The Tennessee Legislature has adopted a resolution introduced by Mr. Richardson, declaring that they regard the Southern Pacific Railroad as a necessity of the age, and commend it and its extension from El Paso, through Arazona, to the Pacific Ocean, to the Senators and Representatives in Congress, so as to obtain therefor such countenance and aid as may, within due constitutional limits, be properly conferred.—*Exchange.*

REPORT OF THE SECRETARY OF THE TREASURY ON THE STATE OF THE FINANCES.

TREASURY DEPARTMENT,
December 5, 1859.

SIR: In compliance with the act of Congress entitled "An act supplementary to an act to establish the Treasury Department," approved May 10, 1800, I have the honor to submit the following report:

On the 1st day of July, 1858, being the commencement of the fiscal year, 1859, the balance in the treasury was \$6,398,316 10
The receipts into the treasury during the fiscal year 1859, were as follows:

For the quarter ending September 30, 1858—
From customs.....\$13,444,520 28
" public lands.....421,171 84
" miscellaneous sources.. 959,987 34
" treasury notes.....405,200 00
" loan authorized by act of June 14, 1858.....10,000,000 00
25,230,879 46

For the quarter ending Dec. 31, 1858—
From customs.....9,054,228 60
" public lands.....412,190 97
" miscellaneous sources.. 306,200 24
" treasury notes.....1,122,000 00
10,884,619 81

For the quarter ending March 31, 1859—
From customs.....12,786,252 19
" public lands.....490,947 78
" miscellaneous sources.. 503,319 58
" treasury notes.....160,000 00
" loan authorized by act of June 14, 1858.....8,535,000 00
22,475,519 55

For the quarter ending June 30, 1859—
From customs.....14,240,223 31
" public lands.....442,376 71
" miscellaneous sources.. 313,521 17
" treasury notes.....7,980,290 00
" loan authorized by act of June 14, 1858.....85,000 00
23,101,452 19

The aggregate means, therefore, for the service of the fiscal year ending June 30, '59, were.....88,090,787 11

The expenditures during the fiscal year ending June 30, 1859, were as follows:

For the quarter ending September 30, 1858.....\$21,708,198 51
" " " December 31, 1858... 17,956,347 85
" " " March 31, 1859.....18,874,779 86
" " " June 30, 1859.....20,212,185 35
\$83,751,511 57

Which amount was applied to the various branches of the public service as follows:

Civil, foreign intercourse and miscellaneous.....\$23,635,820 94
Service of Interior Department, (Indians and pensions).....4,753,972 60
Service of War Department.....23,243,822 38
Service of Navy Department.....14,712,610 21
Public Debt.....17,405,285 44
\$83,751,511 57

As exhibited in detail in statement No. 1.
Deducting the expenditures during the fiscal year 1859 from the aggregate means during the year, a balance remained in the Treasury on July 1, 1859, of.....\$4,339,275 54

From the 1st July to 30th September, 1859, being the first quarter of the current fiscal year 1860, the receipts into the Treasury were as follows:
From customs.....\$15,947,670 62
From public lands.....470,244 62
From miscellaneous sources.. 379,450 61
From treasury notes.....3,611,300 00
From loan authorized by act of June 14, 1858.....210,000 00
20,618,665 85

The estimated receipts during the three remaining quarters of the current fiscal year are as follows:

From customs.....\$40,000,000 00
From public lands.....2,000,000 00
From miscellaneous sources.. 1,500,000 00
From treasury notes.....5,567,400 00
From loan authorized by act of June 14, 1858.....1,170,000 00
50,426,400 00

Making the aggregate of ascertained and estimated means for the current fiscal year ending June 30, 1860.....75,384,541 39

The expenditures for the first quarter of the current fiscal year 1860, that ending September 30, 1859, were:

For civil, foreign intercourse and miscellaneous.....\$4,748,130 89
For service of Interior Department, (Indians

and pensions).....1,739,176 11
For service of War Department.....5,473,949 10
For service of Navy Department.....3,381,551 90
For public debt.....4,664,366 76

The probable expenditures from appropriations heretofore made by law, during the three remaining quarters of the current fiscal year to June 30, 1860, are estimated at.....40,995,558 23

Making the expenditures for the current fiscal year under existing authority.....61,602,732 99

Deducting this aggregate expenditure from the aggregate of the before estimated means for the current fiscal year 1860 will leave an estimated balance in the treasury on the 6th June, 1860, of.....\$14,381,808 40

ESTIMATES OF THE FISCAL YEAR FROM JULY 1, 1860, TO JUNE 30, 1861.

Balance in the treasury July 1, 1860, as above stated.....\$14,381,808 40

Estimated receipts from customs from July 1, 1860, to June 30, 1861.....60,000,000 00

Estimated receipts from public lands from July 1, 1860, to June 30, 1861.....4,000,000 00

Estimated receipts from miscellaneous sources from July 1, 1860, to June 30, 1861... 2,225,000 00

Aggregate receipts.....80,666,808 40

Estimated expenditures from permanent appropriations.....8,173,582 48

Estimated expenditures from unexpended balances of appropriations.....12,262,452 75

Estimated expenditures from new appropriations estimated for.....46,278,293 50

\$66,714,928 79

Deducting the aggregate estimated expenditures from the aggregate estimated receipts into the treasury during the fiscal year from July 1, 1860, to June 30, 1861, as above stated, the estimated balance will remain in the treasury on the 30th June, 1861, of.....\$13,891,879 61

The failure of Congress at its last session to pass the bill for the service of the Post Office Department renders necessary appropriations for that department which must be paid during the present fiscal year. As these amounts are not contained in the preceding statement, it will be necessary to consider them, in order to arrive at the true condition of the treasury at the close of the present and next fiscal year.

It will be seen from the communication of the Postmaster General, accompanying my report on the estimates, that there will be required to pay the deficiency in that department for the fiscal year ending the 30th of June, 1859, the sum of \$4,296,009; and to supply the deficiency for the present fiscal year ending the 30th of June, 1860, the further sum of \$5,526,324. In addition to these amounts, the Secretary of the Interior submits an estimate for the sum of 539,350, which he will require during the present fiscal year to carry out certain Indian treaties approved at the close of the last session of Congress. These three sums, amounting to \$10,364,683, must be met during the present fiscal year, and must therefore be deducted from the estimated balance of \$4,020,125 40, and an estimated balance on the 30th of June, 1861, of 3,520,196 61. This last amount will be increased to the extent of the unexpected appropriations for the next fiscal year which may remain in the treasury undrawn on the 30th of June, 1861.

It will be seen that there will be no necessity to provide additional means for the treasury, provided the receipts should be equal to the estimates, and the appropriations made by Congress do not exceed the amounts estimated for by the department.

I submit, with much confidence, the estimate of probable receipts during the present and next fiscal years. It is based upon the operations of our trade and commerce for the last twelve months; and upon the conviction that the business of the country will continue in its present state of comparative prosperity.

At the last session of Congress I submitted

an estimate of the probable receipts into the treasury for the then three remaining quarters of the fiscal year ending the 30th of June, 1859. The result has not approximated the estimate with unprecedented accuracy—the actual receipts being \$38,579,391, while the estimate was \$38 500,000—and as the present estimates are based upon similar data, it should greatly strengthen the confidence to be put in their correctness.

Some apprehension has been felt that the large amount of imports during the last twelve months would be attended with unhappy results in the business of the country. This apprehension would be well founded if the facts showed that the imports exceeded the wants of the country and its ability to pay for them. The imports during the last fiscal year (as will be seen by reference to table 7,) were \$338,768,230, whilst the exports for the same period were \$356,789,462, showing an excess of exports of \$18,021,332. As large as the imports for the last fiscal year were, they have gone into consumption. Table 47 exhibits the amount of goods in warehouse in New York, on the first of November for a series of years. It will be seen that the amount on hand on the first of November last does not exceed the amount in previous years, when the country was highly prosperous and its business steady and regular. These figures do not exhibit an unhealthy state of trade and business. One fact, however, connected with our exports has attracted much attention, and led many to believe that we were importing beyond our ability to pay; I allude to the increase of specie in our export tables. If specie occupied in the business of the country only the position of a circulating medium, and the supply was limited accordingly, there would be just ground for this apprehension; such, however, is not the case. It constitutes an important element in the list of our productions; and, like all other productions, where the quantity exceeds the legitimate demands of the country for use and consumption, it becomes a very proper article for export.

It is estimated that since 1848 California has produced over five hundred millions of gold. Would her condition have been improved by retaining that amount of specie within her limits, to the exclusion of those articles required for the use of her citizens, and in exchange for which this specie has been sent to the Atlantic and abroad? During the same period Georgia has produced more than five million bags of cotton. The same policy which would require California to retain her gold, beyond the legitimate wants of her people, would with equal propriety require Georgia to retain within her limits the excess of the production of cotton over the wants of her people. The argument is as applicable to all the States as to one, and I have used the illustration of single States only because they were very marked and striking. Unless the export of specie goes to the extent of violating this manifest principle, it constitutes no just ground of alarm or anxiety. In this connection it should be observed that the large excess of specie exports commenced with the discovery of the California mines, and has increased very much in proportion to their increased production, as will be seen by reference to table 8, which exhibits for a series of years the amount of our export of specie. The exact amount of the production of the California mines during this period is not known, but it is believed that it exceeds very largely the amount which has been generally stated. We have no reliable mode of ascertaining it; but, from the best information I have been able to obtain, I should

estimate the amount at not less than seventy millions of dollars.

Whenever the export of specie shall exceed proper limits, the effect will soon be seen and felt in the financial and commercial operations of the country. It would probably be first exhibited in the specie basis of the banks, showing an increased proportion of circulation and deposits to the amount of specie in their vaults, and this would soon be followed by derangement and depression in the general trade and business of the country. At present there is no evidence that either of these results are to be apprehended. By reference to table 9, it will be seen that the specie basis of the banks, (when the tables for 1859 were prepared,) as compared with their circulation and deposits, is more favorable than in 1850, the year preceding the increase of specie exports. It is probable that some change has occurred since the last bank reports; of that we have no reliable information; but it is not believed that it will materially vary the general proposition. It is appropriate here to remark, that in view of the large and constant increase of the production of precious metals, the public should look to the policy of substituting specie to a great extent for the present paper circulation. The process should be gradual, and whilst it would not derange the business of the country, would operate as a wholesome check upon banking and overtrading. The adoption of an independent treasury system by the several States, as recommended in a former report, would go far towards the accomplishment of this desirable result.

There is no mode of ascertaining the amount of specie in general circulation. All estimates on that point are purely speculative. During a prosperous condition of the country it no doubt increases with the demands of business; and whenever, from any cause, the supply is below the wants of the country, it will be manifested by a depression in trade and general embarrassment. Until these indications appear, we may safely calculate that there has been the usual and necessary increase.

With some persons the idea seems to prevail that we are necessarily overtrading with those countries to which our specie is carried, and as the most of it goes to the ports of Great Britain, they conclude that we are therefore buying too largely of British productions. The fact, that payments are made in England must not be considered as conclusive evidence that the debt has been contracted during the course of our trade with that country. By reference to table 10, it will be seen that our imports for the year ending June 30, 1859, from the East and West Indies, and other countries named in the table, exceed our exports to those countries to the full extent of the excess of our export of specie. It will also be observed that the articles which we import from those countries are articles of necessity, and generally such as are not produced in our own country. These articles must be had, and if we can not furnish in exchange for them by any other of our productions, they must be paid for in specie, and it is not material whether the specie for that purpose is sent to London or to the foreign port of exportation. If this branch of trade consumes the excess of specie exports, it would leave our commercial operations with all other countries upon a safe basis, even in the estimation of those who indulge so many apprehensions on account of our heavy exports of specie. It should be observed, in this connection, that our exports to Great Britain for the last fiscal year, exceed our imports about 50 millions; the excess, to a great extent, being applied to the payment of the demands of the countries to which I have just referred.

These views are submitted to the consideration of Congress in support of the opinion that we may look with confidence to a continued increase in the business of the country. The natural tendency in times of prosperity is to extravagance and overtrading, and this feeling should not be stimulated. If indulged, it will in the future, as it has done in the past, lead to revulsions and embarrassments; but there is no serious danger to be apprehended, if the increased business of the country continue to bear a proper proportion to those natural causes which produce and sustain it.

Entertaining these views, I do not doubt that the actual receipts into the treasury for the present and next fiscal year will be fully equal to the estimates. The only remaining question in connection with the estimates to be considered is the probable demands upon the treasury during this period. If the appropriations made at the present session do not exceed the amount contained in the estimates, it is believed that they can be met with the ordinary and extraordinary receipts already provided for by law. The estimated balance that will be in the treasury on the 30th of June, 1861, is only \$3,530,196.61, and leaves no margin for additional appropriations. If, therefore, the appropriations should exceed the estimates, or Congress should determine to provide within this period for the payment of any portion of the public debt, it will become necessary to make provision for such contingencies. The idea of increasing the public debt to meet the ordinary expenses of the government should not be entertained for a moment. If additional demands are created upon the treasury by the legislation of the present Congress, provision must be made to meet them by such increase of tariff duties as may be required for that purpose. In such an event I would respectfully refer Congress to my last report, as containing the views of the department on the subject.

A critical examination of the estimates for the next fiscal year, submitted to Congress, will exhibit considerable reduction from former estimates. The remark is applicable to every department where any discretion can be exercised over the expenditure. In most cases the amounts are fixed by law, and can be either increased or diminished by the head of the department. I have endeavored to enforce the strictest economy in the various branches of the Treasury Department. In the single branch for collecting the revenue the expense has been materially reduced by adopting and carrying out, where the power existed, the reforms recommended in the bill for re-organizing the collection districts of the United States, &c., submitted by the department to the last Congress. With further reductions which it is contemplated to make, I have felt warranted in reducing the estimate for the expense of collecting the revenue for the next fiscal year five hundred thousand dollars. The passage of the bill to which I have referred would greatly aid the department in this work of reform.

The public debt on the 1st of July, 1858, as stated in my last annual report, was \$25,155,977.66. The act of June 14, 1858, authorized an additional loan of \$20,000,000, which has been accordingly negotiated. Of this \$18,620,000 had been paid into the treasury, and the stock issued therefor on the 1st of July, 1859, the commencement of the present fiscal year. A portion of the remainder has been since paid, and the stock therefor issued. The balance will doubtless be soon completed, which will make the permanent public debt \$45,155,977.66.

Of the temporary public debt authorized by the act of December 23, 1857, providing for the issue of \$20,000,000 in treasury notes, there were outstanding on the 1st of July, 1858, as shown by my last report, \$19,754,800. On the 30th June, 1859, the close of last fiscal year, the amount of these notes outstanding was \$15,046,800. The details of the various descriptions of the public debt on the 30th June, 1859, are shown by the statement marked 3.

In the estimated means of the Treasury for the present and next fiscal years, it will be seen that no provision is made for the permanent redemption of any portion of the twenty millions of treasury notes. The authority for re-issuing these notes will expire on the 30th of June next, and it will therefore be necessary for Congress to extend the law for that purpose for another period.

On the 21st of January last, I submitted to the House of Representatives, in answer to resolutions of that body, a report in reference to the export and import trade of the United States with Great Britain and France. The investigation which I was required to make for that purpose brought to my attention the various systems adopted by different countries of obtaining and keeping commercial statistics. These systems are so variant that I found it impracticable to institute any comparison of the facts exhibited in the tables of different Governments, which could be regarded as accurate and reliable. Every commercial man will pronounce such a state of things an evil of great magnitude, and one which demands a prompt remedy, if it can be found.

To avoid a recapitulation of the views presented in that report, and for the purpose of bringing the subject to the attention of the present Congress, I append to this report a copy of that communication, (marked 11,) and would ask for it a consideration at this time. I do not know a greater benefit that could be conferred upon the commercial interest of the country, at so small an expense, than the adoption by the leading commercial governments of the world of a uniform system of commercial statistics—a uniform unit and currency, and uniform weights and measures. Upon one branch of the subject, valuable suggestions will be found in the accompanying report of the Directors of the Mint. The importance of the subject cannot be overestimated, and it is hoped that it will receive the careful consideration of Congress at its present session.

I must again call the attention of Congress to the provisions of the act of March 3d, 1857, on the subject of deposits by disbursing agents, and repeat the recommendations heretofore made for its modification. In my former reports I have presented the reasons for some change in that act so fully that I deem it unnecessary to do more at this time than to refer to these reports, and, for the reasons therein stated, again to request the action of Congress on the subject.

The attention of Congress is particularly called to the accompanying report from the engineer in charge of the Bureau of Construction. It gives a full and detailed account of the operations of that bureau, charged with the construction of the various public buildings under the direction of this department. The principle buildings now in course of construction are the Treasury extension, in this city, and the custom-houses in Charleston and New Orleans. These buildings were commenced under the direction of Congress before I came into office. Each of them were planned on an extensive scale, and large amounts have been expended in their erection before my connection with this department.

For this neither my predecessors or myself are responsible. Our duty in the premises has been simply executive. Under these circumstances I submitted, at the last session of Congress, estimates for continuing the work upon them during the present fiscal year. Having been commenced, I deemed it sound policy and true economy to prosecute the works with energy to their completion. The estimates submitted at the last session were made under that conviction. Congress took a different view of the subject, and reduced the estimates to a point which seemed to look merely to the duty of preserving the unfinished works from injury, and suspending, for the present, at least, their completion. In accordance with the policy thus indicated, I directed the operations on all the buildings to be brought within the means at the disposal of the department; and when those means were exhausted to stop the work. The report of the engineer in charge will show that these directions have been thus far complied with. The balances of former appropriations will soon be exhausted, when all further operations will be suspended. In accordance with the policy so clearly indicated by the action of the last Congress, I have only estimated for a sufficient sum to keep them from injury for the next fiscal year. If Congress should adopt a different policy at the present session, and determine to continue operations on these works, I would respectfully refer to the report of the engineer in charge for estimates of the amounts that will be required during the next fiscal year.

I would again invite the attention of Congress to the subject of marine hospitals. The fact submitted, as well in the last as in the present report of the engineer in charge of the Bureau of Construction, demand an investigation of the subject by Congress. The views which I have heretofore presented are strengthened by each year's experience, and I would again press them upon the consideration of Congress. Three new hospitals have been completed, and are ready to be put in operation. Before it is done the necessity and propriety of the step should be considered in the light of the facts presented in the reports to which I have referred. The refusal of the last Congress to authorize any additional buildings of this character would indicate a concurrence with the views of the department on the subject. It only remains to be determined what disposition should be made of those which have been erected.

In reference to other public buildings authorized by previous acts of Congress, and heretofore suspended for the want of means, steps have been taken to secure the selection of proper sites. Plans and specifications are being prepared with a view of commencing their erection when it can be done with a due regard to the condition of the treasury. The policy of the last Congress, in suspending the work on those already in process of construction, would indicate that new ones should not be commenced until provision is made for the completion of those already begun.

The condition of the Louisville and Portland canal is so anomalous as to require the action of Congress. Under the amended charter of the State of Kentucky of January 31, 1845, the stock previously belonging to individuals has been redeemed from the earnings of the canal, except that a single share each is held by certain persons to qualify them to act as directors of the corporation. The act of the State of Kentucky of February 22, 1844, provides that when the United States shall become the sole owner of the canal and jurisdiction of the State over it shall be yielded to the United States.

The amount advanced from the treasury for the construction of this canal was \$233,500, and the amount of dividends paid into the treasury up to 1842 is \$255,182.48, so that in fact the whole cost of the stock held by the United States had been reimbursed previous to the amended charter. Since that charter, and the redemption of the stock of individuals under its provisions, the earnings of the canal have been applied to its improvement by the directors, and whenever the amount has exceeded that requirement, it is understood the tolls have been reduced. No revenue has been received from it since that period, and none is contemplated.

Under the laws of Kentucky the United States are substantially owners of this canal, but no authority has been given to supersede the corporation in its management, no action having been had by Congress on this subject since the amended charter by Kentucky. Under these circumstances I would refer the whole subject to Congress for such action as they may deem proper.

The annual report of the Director of the mint is herewith transmitted, (marked 12,) as also the reports of the various bureaus of the Treasury Department, (marked from A to L.) They contain much interesting information in connection with their respective branches of the public service.

The report of the Superintendent of the Coast Survey will be laid before Congress at an early day.

HOWELL COBB,
Secretary of the Treasury.

ANNUAL REPORT OF THE POST-MASTER GENERAL.

Mr. Post-master General HOLT has prepared a very elaborate report of the condition of the postal service of the country. It is an able document, and in its main recommendations we think it a judicious one. We regret to observe the absence of any illusion to the recent remarkable, and, as we regard them, unreasonable and unjust decisions of the Department in regard to the interception of "incendiary publications," and the newspaper label system.

The following is the report of the fiscal condition of the Department:

REVENUE AND EXPENDITURES.

The actual (paid) expenditures of the department in the fiscal year ending June 30, 1859, amounted to.....\$11,458,083 63

For transportation of inland mails, including payments to route agents, local agents, and mail messengers.....\$6,112,996 68

For transportation of foreign mails to-wit:

New York to Liverpool.....	\$83,177 30
New York to Havre.....	136,122 11
New York to Bremen.....	84,151 38
New York, by Havana, to New Orleans.....	17,213 48
New York to Havana.....	3,069 34
Charleston to Havana.....	60,000 00
New Orleans to Vera Cruz.....	2,810 73
Aspinwall to Panama.....	100,000 00
Agencies at Panama and Aspinwall.....	9,936 77
Transportation agents.....	4,927 48

404,428 95

For California mails under special appropriations, to-wit:

Panama to Astoria from October 1, 1858, to June 30, 1859.....	\$261,037 50
San Francisco to Olympia.....	122,500 00
New Orleans to Ventoza, from Nov. 1, 1858, to June 30, '59.....	166,666 67

550,204 17

For compensation to post-masters.....	2,453,900 97
For clerks in post-offices.....	929,900 23
For ship, steamboat and way letters.....	14,496 86
For office furniture for post-offices.....	2,187 35
For advertising.....	46,208 26
For mail bags.....	57,352 92
For blanks.....	44,917 59

For mail locks, keys, and office stamps.....	6,749 65
For mail depredations and special agents.....	52,081 55
For postage stamps.....	40,655 61
For stamped envelopes.....	49,138 43
For wrapping paper.....	31,338 35
For payments to letter carriers.....	187,037 83
For miscellaneous payments.....	181,618 21
For payments for balances due on British mails.....	145,966 81
For payments for balances due on Bremen mails.....	5,734 21
For payments for balances due on Hamburg mails.....	9,237 15
For payments for balances due on French mails.....	40,911 85

Total of actual (paid) expenses.....	\$11,458,083 63
But to this must be added the ascertained liabilities of the department, which could not be paid owing to the failure of Congress to make the usual appropriations, and which now constitute a deficiency to be provided for June 30, 1859.....	4,295,009 26

Total of actual (paid) expenditures and liabilities.....	\$15,754,092 89
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This sum includes \$789,599 56 appropriated by special acts of Congress out of the general treasury, which, being deducted, leaves the actual (paid) expenditures \$10,668,484 07 instead of \$11,458,083 63, and the total of expenditures and liabilities \$14,964,493 33 instead of \$15,754,092 89.

If there be added to \$11,458,083 63 the sum of \$55 96, closed by suspense, and the sum of \$627 26 gained on the bad debt account be subtracted, then the actual expenditures, as adjusted in the Auditor's Office, will be \$11,457,512 33.

The gross revenue for the year 1859, including receipts from letter carriers and from foreign postages, amounted to \$7,968,484 07, as stated below:

Letter Postage.....	\$96,531 78
Registered Letters.....	25,052 65
Stamps Sold.....	6,158,145 00
Newspapers and Pamphlets.....	569,332 39
Fines.....	50 00
Receipts on Account of Emoluments.....	79,010 07
" " Letter Carriers.....	187,037 83
" " Dead Letters.....	3,134 79
Extra Compensation Overcharged.....	1,103 84
Miscellaneous Receipts.....	19,064 52

Total revenue.....	\$7,968,484 07
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Being an increase of six per cent. over the year ending June 30, 1858, but still \$2,700,000 short of the actual (paid) expenditures (\$10,668,484 07) as adjusted on the Auditor's books, exclusive of the permanent annual appropriations, amounting to \$700,000, granted to the department by the acts of March 3, 1847, and March 3, 1851, for the transportation and delivery of free mail matter for Congress and the Executive departments, and of the special appropriations for mail transportation.

To this the amount (\$2,700,000) must be added the unpaid liabilities or deficiency, as estimated on June 30, 1859, \$4,296,009 26, making the total excess of expenditures for the year \$6,996,009 26.

I respectfully invite attention to the highly satisfactory report of the Auditor, hereto appended. From this interesting document I derive the following synopsis of the financial operations of the department in the past fiscal year:

The balance standing to the credit of the department on the books of the Auditor on June 30, 1858, was.....	\$608,313 06
The receipts of the department from all sources during the year 1859.....	7,968,484 07
Amount of bad debts collected.....	627 26
The amount of various appropriations drawn from the treasury during the year was.....	\$3,915,946 49
From which should be deducted. 325,000 00	
Being a part of the appropriation of \$700,000 (under acts 3d of March, 1847, and 3d of March, 1851,) for the year 1860 applied to the service of 1859, leaving.....	3,590,946 49

Total receipts.....	\$12,163,370 83
The whole amount of actual (paid) expenses in the year, including \$55 96 for accounts closed by suspense.....	11,458,139 59

Leaving to the credit of the department July 1st, 1859.....	\$710,231 29
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This amount of \$710,231 29 to the credit of the revenue of the department, July 1, 1859, is made up of the balances due from post-masters and late post-masters which have been accumulating from July 1, 1845, and can only be made available as the are collected.

For the year ending June 30, 1858, the expenditures were.....	\$42,722,470 01
And the revenue.....	7,486,792 86
Excess of expenditures for 1858.....	\$5,235,677 15
For the year ending June 30, 1859, the expenditures and liabilities were.....	\$14,464,483 33
And the revenue.....	7,568,484 07
Excess of expenditures for 1859.....	\$6,996,009 26

The Post-master General estimates the probable expenditures for the year 1860 at \$15,038,627 62, and the means for the same year at \$10,222,534 91, leaving a deficiency of \$4,816,092 71.

NUMBER OF OFFICIALS.

On the 30th June last there were in the service—	
475 route agents, at a compensation of.....	\$368,667
31 express agents, at a compensation of.....	30,700
42 local agents, at a compensation of.....	29,618
1,549 mail messengers, at a compensation of....	196,999
	\$926,174
This amount added to the cost of service as in operation on 30th June	9 468,757
Makes the total on the 30th June last.....	\$10,094,531
The reduction in the cost of the service from the 30th June to the 30th Sept., were.....	657,521
Making the total amount on the 30th Sept.	\$9,437,410

NUMBER OF POST-OFFICES.

Whole number of post-offices in the United States on the 30th June, 1858.....	27,977
Number that were established during the year ending June 30, 1859.....	1,355
Number that were discontinued.....	893
Net increase of offices during the year.....	562
Whole No. of post-offices on the 30th June, 1859....	28,539
Number of offices of which the names and sites were changed.....	432
Number of which the appointments were made by the President.....	417
Number of post-masters appointed during the year ending June 30, 1859.....	7,548
Of these 4,639 were to fill vacancies occasioned by resignation.	
867.....do..... removals.	
295.....do..... deaths.	
292.....do..... change of names and sites.	
1,153.....do..... establishment of new offices.	

PENNY POST.

The system of delivering letters by carriers at the domicile of the citizen was first recognized by the act of 3d of March, 1825, and has, within a few years, been successfully introduced into several of our principal cities. Though constant endeavors have been made to improve it, it is still imperfect in its details and unsatisfactory, alike to the public and to the Department, in its operations. The system can not be regarded as having accomplished the object of its establishment, so long as it does not command and deliver the local correspondence of the different cities in which it exists, which thus far, it has wholly failed to do. This correspondence is now almost entirely in the hands of private expresses, whose rates are so low as to make a successful competition with them, on the part of the government, impossible. Their charge for the delivery of a letter is generally but one cent, while this amount is necessarily exacted by the Department for the carriers, and one cent in addition is collected on the local correspondence, as the postage fixed by the act of 1825, on "drop letters." Hence, the aggregate postage on the city correspondence, under existing laws, which require that the system shall be self-sustaining, is at least two cents, which precludes the possibility of any successful competition with the private expresses. I therefore

recommend the repeal of this provision of the act of 1825, so far as it can be construed as applying to "drop letters" delivered by carriers. This would not result in any perceptible diminution of the postal revenues, inasmuch as the correspondence which would thus be secured by the Department does not now pass through its offices. It is true the Post-master General might, in his discretion, arrest the operation of these private expresses, by declaring the street and avenues of the cities to which they belong to be post roads; but until the Department is prepared to deliver city letters as cheaply and promptly as such companies can possibly do, I should regard the exercise of this power as unwise, if not harsh and oppressive.

Another motive for persistent effort on the part of this Department to render the delivery by carriers as perfect as possible is found in the fact that the box system is being rapidly outgrown by the population of our principal cities, and must finally be abandoned—as it has been in European capitals. There are at present but about four thousand boxes in the in the post-office of New York, and yet even this number leads to much confusion and inaccuracy in the distribution and delivery of mail matter. Was the number augmented to ten thousand—which would not more than meet the present ever increasing demand—it is manifest that no memory would be equal to the task of associating the names with the appropriate boxes, and that the practical working of the system would become impossible. A frequent, rapid, and punctual delivery, on reasonable terms, of all the correspondence received at the post-offices of our great cities, is what the public have a right to claim of the Department, and what it will be its unceasing endeavor to secure to them.

Mr. Holt next enters into a discussion of the existing usage of transmitting the exchanges free of postage, and argues against it. We think he is right here, and that all people, whether officials, journalists, or others, should be required to pay their postage equally.

THE ABOLITION OF THE FRANKING PRIVILEGE.

It is, of course, not intended to assert that the correspondence of the Government should be transmitted at the personal charge of its functionaries, but only that the cost of conveying such correspondence, when passing through the mails, should be defrayed from the national treasury. There is no more reason why the Post-Office Department, through its contractors, should perform this service gratuitously for the Government, than there is that the steamboats and railroad companies of the country should transport its troops, munitions of war, and stores, without compensation. What shall be the character and amount of written or printed documents forwarded on behalf of the Government, and under what safeguards against abuse, are questions whose solution belong exclusively to Congress, and which it is not my purpose at present to discuss. I desire to maintain only the general proposition that whether the written and printed matter be great or small, if it be dispatched in the name and in the interest of the Government and by its agents accredited for the purpose, it should be charged with precisely the same rates of postage to which it have been subjected had it been forwarded by private citizens. The franking privilege, as accorded to various officers of the Government, was from the beginning, and still is anomaly in the postal system, and in direct conflict with the true theory of its creation. Had this department, like the others, been placed as a charge upon the treasury, and were it essentially a political instrumentality,

and the property of the nation, it would be as incongruous for it to demand remuneration for its services to the Government, as it would be for the army or navy to do so, but this is not and never has been its actual or theoretical status. Beyond its political authority in establishing the department and its revisory power over its administration, the relations of the Government to it are precisely those of the private citizen.

It is well known that the expenses of the department for transportation have rapidly increased within the last ten years. In 1849 they amounted to \$2,577,407 71; but for the year ending the 30th June, 1859, they reached the sum of \$9,478,457. This has been produced by the enormous bulk and weight of the mails, which are principally due to the vast quantity of heavy books and printed documents sent under the government frank.—Mails, which but recently weighed a few hundred pounds, are now, from this cause, found weighing tons. The rates of postage on printed documents, &c., being but nominal, the cost of their conveyance is, in fact, a tax on the letter correspondence of the country.—Hence, as the great mass of the matter franked by the government officials is printed, were even paid for at the prevailing rates, still in precise proportion as the government is the patron of the mails, would the service be unremunerative to the department. Were the "free matter" now conveyed charged with the existing rates of postage, it is confidently believed that it would yield an annual revenue of at least one million eight hundred thousand dollars; yet for this service the department receives but \$700,000, and actually expends in its performance but little, if anything, short of \$3,000,000.

Did no other reason exist these abuses and the disastrous consequences to which they lead, Congress would be fully justified in abolishing the franking privilege.

DEAD LETTERS.

I have to report that the whole number of dead letters during the last fiscal year is estimated at 2,500,000, including about 500,000 "drop letters" and 50,000 "held for postage." Deducting these two classes, the number of letters actually conveyed in the mails, and failing to reach the persons addressed, may be estimated at less than two millions (2,000,000) a year.

MISSISSIPPI RIVER MAILS.

The service between St. Paul and New Orleans was performed during the past year at an aggregate cost of \$328,278. Its earnings were to inconsiderable to be the subject of serious comment. The establishment of this river route on its present basis was resisted by the Department as long as was possible, from a thorough conviction that it would involve a most deplorable waste of its revenues. This conviction, however, was unheeded, and on the 5th of August, 1854, Congress, by a mandatory act, obliged the Post-master General to put it into operation, irrespective of its product, and irrespective of the absence of those postal wants which the act professed to supply. The result has fully realized the anticipations and predictions of the Department. Since the passage of the act referred to, more than thirteen hundred thousand dollars have been expended in the transportation of these river mails, with a return so slight as scarcely to justify the designation of the expenditure as postal in its character. For a time it is true, that the route possessed some importance, because of the through mails which passed over it: but, from the completion of various railroads, these through mails are now conveyed by land, and

in consequence the river route has become essentially local, and supplies only the small offices along the banks of the Mississippi. All the large towns are or will be supplied in advance by lateral mails carried on the railroads. It is believed that the service could be performed for one-fourth of the sum which it now costs, were the Department permitted to contract for it by the trip. A reduction amounting to \$47,213 has been made above the mouth of the Ohio, and were a corresponding reduction made between Cairo and New Orleans, the expenditure would be still greater than the revenue from the route would justify.

NEW YORK, NEW ORLEANS, AND CALIFORNIA MAILS.

The contracts for these mails, via. the Isthmus of Panama, expiring on the 30th September, 1859, and not being willing to extend them, because of the exorbitant compensation exacted, I invited proposals for their transportation for nine months only, in order that Congress, which has so constantly supervised this service, might have an opportunity of placing it on such a basis as should be agreeable to it. The result has been the conclusion of an engagement with Cornelius Vanderbilt, who has stipulated for the conveyance of the mails, for the period named, at \$37,500, for those to and from New York, and \$150,000 for those to and from New Orleans—to which being added the railroad charges, amounting to \$75,000, the aggregate cost will be \$262,500, or, with the salary of the mail messengers added, at the rate of \$351,000 per annum, and showing an annual gain, as compared with the pre-existing contracts, of \$387,250.

The amount paid for the New Orleans service is very liberal, but it has been submitted to cheerfully by the department, because of the earnest desire felt to place that commercial emporium of the south in as direct communication as possible with the Pacific. The contractor has also obliged himself to transfer these mails to the Nicaragua route at the earliest moment practicable, and from his high character and indomitable energy, connected with the vast capital he wields, no doubt is entertained but that the pledge thus given will be promptly and faithfully redeemed.—This by avoiding the onerous Panama railroad tariff, will still further reduce the expenses of transportation \$50,000, and will establish on an enduring footing a great national thoroughfare, the opening of which has been and is an object of universal solicitude. The journey to our Pacific States and Territories will thus be shortened by some 700 miles, and permanence given to a route which must be the successful rival of that via Panama, and which, at present, is alone capable of affording adequate protection against those exactions of the Panama Railroad and Pacific Steamship Companies, which the judgement of the public has long since pronounced unreasonable and oppressive. This route, being treated as not strictly postal, has been heretofore charged on the treasury, except the \$100,000 paid by the department to the Panama railroad for the transit across the Isthmus;—the compensation stipulated for under the present contract is, however, payable out of the revenues of the department. Provision should be made for the support of this service from the treasury, less the actual earnings of the route.

GREAT OVERLAND MAIL.

The service upon this extended route has been performed with great regularity, and generally within schedule time; but the contract has proved one of the heaviest burdens to

which the department has ever been subjected. With an expenditure at the rate of \$600,000 per annum, the postage received in return have not amounted to more than \$27,229 94, so that after making allowance for such increase as may be anticipated, the department at the expiration of the six years for which the contract was entered into will have lost from this route alone more than three millions of dollars. Feeling anxious to relieve, in some degree, the postal revenues from this exhausting drain, I proposed a reduction of the semi-weekly to a weekly service, which would have resulted in an annual saving, as compared with the present outly, of \$150,000. On referring the question, however, to the Attorney General, he determined that in consequence of the customary clause giving the Post-master General revisory power over all mail contracts, having been omitted in this, the desired curtailment could not be legally made. The whole matter being thus placed beyond the control of the department, the action of Congress alone is capable of furnishing the remedy desired—and I can not too earnestly recommend its early and decided interposition.

If no compromise can be affected with the parties upon terms deemed reasonable, then I would urge, as an act of simple justice, that this gigantic service which was established at the instance of Congress and in furtherance of great national objects shall be at once, charged upon the public treasury. Until a railroad shall have been constructed across the continent, the conveyance of the Pacific mails, overland, must be regarded as wholly impracticable. These mails, as dispatched semi-monthly, average ten tons in weight, which, if divided into semi-weekly departures, would give two and a half tons for each, thus requiring, in view of the condition of the road, ten coaches, instead of the single one now employed, and costing, at the present rate of compensation, six millions of dollars per annum for transportation alone, with a product of \$327,202 63.

The route has now been opened, and its availability for a light mail demonstrated, so that should war occur with any maritime power, threatening embarrassment to our ocean mails for the Pacific, the service could, without delay, be re-established on its present basis.

After discussing more in detail the various reforms proposed to increase the revenue of the Department, the Post-master General now sums up the matter as follows:

Not to pursue the subject further, in view of what has been done and proposed the financial status of the department would be as follow:

Deficit for the year ending June 29, 1859. \$6,996,009 26
CONTRA.

Annual retrenchment from curtailments already made—less \$287,250 of \$637,356 saved on renewal of contract for ocean service to California—which \$327,250 having been payable out of the Treasury, the gain accrues to it instead of to the postal revenues.	1,539,221 00
Revenue from government postage, on abolition of franking privilege, estimated at.	1,800,000 00
Reduction of cost of railroad transportation.	1,084,558 00
Payment by government on routes non postal.	1,229 756 36
Total.	\$5,653,535 36

This aggregate of \$5,653,535 36, deducted from the deficiency on the 30th June, leaves a deficit of \$1,342,473 90, which the gradual increase of receipts and the curtailments still practicable, would overcome in a few years, and the department be thus restored to complete independence.

There are those who propose, as a substitute for these just and salutary reforms, an increase of the existing rates of postage. To this, I am

well persuaded, the popular judgment is decidedly opposed, and this opposition rests mainly upon the conviction that if the Post Office Department were justly dealt by, it could and would sustain itself without any change in the prevailing rates. This conviction I fully share, and believe that until the experiment of rendering it self-supporting by the measures which have been discussed shall have been made, it would be unwise and unjust to impose any additional burdens on the correspondence of the country. If that experiment, upon being tried, shall fail to restore the department to independence—which can not be anticipated—then an enlightened and liberal people will not hesitate to authorize any augmentation of the rates which may be required—but not until then.

BUFFALO, NEW YORK & ERIE RAILROAD.

The earnings of this road for the fiscal year ending September 30, 1859, were:

From Passengers.	\$148,353 46
" Freight.	372,653 87
" Other sources.	20,242 27
	\$541,249 60

And the expenses were:

Repairs of Road.	\$60,943 75
" Iron.	5 845 67
" Bridges.	5,933 84
" Buildings, etc.	8,469 73
" Engines.	27,471 67
" Cars.	34,121 42
" Tools, etc.	2,746 88
Fuel.	30,154 28
Oil and waste.	12,584 79
Loss and damage.	9,495 71
Conducting transportation.	163,123 31
General superstructure.	8,674 64
Taxes.	13,417 46
Office expenses, etc.	4,110 58
Contingencies.	2,434 81
	368,928 24

Leaving a net surplus of. \$172,321 36
—applicable to the payment of interest on the debt of the Company. In the meantime the actual value of the property of the Company has been largely increased.

Having given a statement of the operations of the road the past year, the report goes on to say:

"The articles of association were filed, and the corporation organized under the General Railroad Laws of the State, in the month of October, 1857. The railroad of the company extends 142 miles, from Buffalo to Corning, at which last mentioned point it intersects the New York and Erie Railroad. The part of the line between Buffalo and Attica—31 miles—was formerly owned and operated by the Buffalo and New York City Railroad Company. These companies became involved, and in consequence they were unable to complete and maintain their respective lines. The first mortgage on the Buffalo, Corning and New York Railroad, and the second mortgage on the Buffalo and New York City Railroad were foreclosed, the property and franchises sold, and conveyances taken from the purchasers thereof to the Buffalo, New York and Erie Railroad Company. By these proceedings, the present company became the owners of the line, subject only to a mortgage of \$500,000 on that part of the road between Buffalo and Attica, which, with arrears of interest, amounted to \$605,000. The remainder of the line from Attica to Batavia—11 miles—was constructed by this company in 1858, as hereinafter stated.

A new first mortgage was executed on the whole road for \$2,000,000, and a second mortgage for \$380,000, to secure the payment of bonds issued for the same amounts, and bearing even date therewith, making a total mortgage debt of \$2,380,000, being \$16,760 per mile of the entire road. Stock to the amount

of \$680,000 was issued, making a total of debt and stock, \$3,060,000, or \$21,549 per mile on the entire line. Of the first mortgage bonds, \$605,000 were set apart to extinguish and retire the bonds for \$500,000 and interest on the Buffalo and Attica division before mentioned; \$370,000 of this amount have already been exchanged for the bonds of this company. Agreements have been made for the exchange of \$20,000 of the remaining \$130,000, and it is expected that in the course of the ensuing year the whole, or nearly so, of the outstanding bonds of the old company will be extinguished. Another amount—\$150,000—of the first mortgage bonds were set apart to be used in paying the expenses of constructing the connecting link between Attica and Batavia, but were subsequently used for another and equally important purpose, as hereinafter stated. The company still hold \$43,200 of their own first mortgage bonds. The residue of the first, and all of the second mortgage bonds and stock were used in the purchase of the road from the trustees and grantees of the former companies, and the extinguishment of the various claims thereon. The amounts so paid are all represented in the item of "cost of road and equipments," in the annexed statements.

Prior to the organization of the company, the Rochester and Genesee Valley Railroad Company had completed and opened their line from Rochester to Avon, a distance of 18 miles. This road was constructed on the same gauge, as the Buffalo, Corning and New York, and New York and Erie Railroads, so that a continuous line with a uniform gauge, was established from the city of Rochester to the city of New York, and also to Buffalo. It was a matter of great importance that this should be continued, as originally designed, as well for the benefits resulting to this line of road from the large local and through traffic to and from Rochester, as for the interests of the towns along and adjacent to the line, whose connections east and west would be injuriously affected by any change. It became known in the summer of 1858 that efforts were making to connect this road with the New York Central Railroad, by lease or otherwise, and by change of gauge, to divert its business entirely to the New York Central line. It was deemed of great importance to prevent this change being made; and to effect this object it became necessary to purchase a controlling interest in the Rochester and Genesee Valley road. This was done in July, 1858, and first mortgage bonds of the company, to the amount of \$150,000, were used for that purpose; and thus this company has secured the continuance of the Rochester connection on terms which are deemed equitable and entirely satisfactory to those interested in the respective roads.

The extension of the Genesee Valley Railroad from Avon to Mt. Morris—16 miles—was completed in June of the present year. This division is now operated by this company, under a temporary lease, and proves a valuable tributary to the general business of the main line, and especially to the Rochester division. It opens the rich valley of the Genesee river, and the flourishing towns of Genesee and Mt. Morris, to the Eastern and Western markets, and gives increased facilities to the local traffic with Rochester and other neighboring towns.

Immediately after the organization of the company, the construction of the road between Attica and Batavia was commenced, and although delayed by vexatious litigation, the work was completed and the road opened on the 21st day of June, 1858, at a cost of \$132,247, including land damages, engineering and other expenses. This amount is represented

in the charge of "cost of road and equipments," and forms a part of the floating debt stated in the balance sheet herewith published. An effort was first made to purchase the track owned by the New York Central Railroad Company, between those points, and an offer was made for it at a price exceeding its real value. That company, however, preferred to retain it, although it had but a circuitous connection with their own main line, and could hardly be a source of profit to them, even without competition. A new line was therefore necessary, and it was constructed by the side of the New York Central road.

The title to a part of the real estate needed for the business of the company in Buffalo, had not been perfected by the former company. It became necessary to complete the purchases so as to render available to the present company the valuable and convenient depot grounds on Exchange and Michigan streets, as well as the approaches to the ware house and freight depot on Buffalo Creek and the Ohio Basin. This has been done at an expense of \$29,500 and the company now have title to and possession of ample depot grounds, with convenient approaches for the accommodation of their passenger and freight traffic.

Since the organization of the present company two locomotive engines have been purchased, and 64 freight cars purchased and constructed, at a total cost of \$41,351. New and permanent bridges, water tanks and station buildings have been erected, and machine shops enlarged, cattle pens and platforms constructed, platform scales put in, and other permanent improvements made, at a cost of \$50,315, all of which are chargeable to "cost of road and equipments." The total expenditures for these various purposes, since October 1, 1857, and which are entirely independent of the ordinary expenses of the company, added to the cost of the new road from Attica to Batavia, amounts to about the sum of \$253,000, and will sufficiently account for the existence of the floating debt exhibited in the balance sheet.

The construction account of the company is now closed, and all the expenditures made hereafter, under whatever emergency, must be met as ordinary expenditures; growing out of its current business. It is hoped, and appearances justify the belief, that the business of the company will be sufficient to extinguish the floating debt within a reasonable period, and at the same time enable them to improve the condition of the road, equipments and machinery.

During the last year the business of the company with Philadelphia, Baltimore, and other points south of Elmira, has materially increased, especially the traffic with the coal and iron regions of Pennsylvania. The extent of this southern business will render it advisable, as soon as the circumstances of the company will permit, or independent aid can be obtained, to extend the road of the company from Corning to Elmira, a distance of 18 miles. A direct connection will thus be effected with the lines of roads south of Baltimore, and south-easterly of Philadelphia, and with the intersecting net work of roads traversing the interior country between those points. These roads traverse the whole coal and iron district of Pennsylvania east of the Alleghany Mountains. Our line affords the only direct railroad connection between Buffalo and Western Canada and this extensive mineral region; and although the traffic is already large—amounting the last year to 9,100 tons of coal and 11,900 tons of iron—the business is still in its infancy. By this route over 200 miles are saved

between Baltimore, and 100 miles between Philadelphia and Buffalo. The business naturally seeking such a line can never be performed or managed satisfactorily, either as regards expense or time required, without a direct connection. It is not unreasonable; therefore, to assume, that the proposed extension to Elmira would greatly facilitate the existing and add largely to the future business of the road. Among other considerations in favor of the project is the certainty that it would give this company the transportation of the Great Southern Mails, destined to Western New York, Canada West, Detroit, and the entire Upper Lake region north of Chicago, as being by far the most speedy and safe line for its transit. The additional revenue from this extra postal service would of itself be nearly equal to an interest of 7 per cent. per annum on the cost of the extension; leaving out of view what would be equally sure to follow, a largely increased passenger and freight business.

Statements from the Assistant Superintendent, Master Machinist, and Superintendent of Car Repairs, show that with an increased business the condition of the road and its equipments has been essentially improved during the year. The Buffalo division of the road had, for the greater part, been in use fifteen years; from Batavia to Corning over six years, so that while the corporation was but recently formed, its road was old, and needed at once large outlays for extraordinary repairs. With the improvements recommended by the Superintendent during the ensuing year, the current expenses of maintaining and operating the road will thereafter be sensibly diminished. The cost of the improvements recommended will be about 17,000.

The rolling stock of the company has been largely improved during the year, and is in good condition for effective service. It consists of 28 locomotive engines, 26 passenger cars, 9 baggage cars, and 377 freight cars.

The value of this rolling stock cannot be estimated at less than \$500,000, and all, or nearly all, in good working condition. The real estate of the company in the city of Buffalo has been acquired at an original cost of about half a million of dollars.

The total number of miles run by all trains was.....	505,381
Cost of repairs to engines and tenders, per mile run.....	\$5.43
Do. passenger and baggage cars, per mile run.....	5.67
Do. freight cars ".....	7.92
Do. fuel used ".....	7.15
Do. oil and waste ".....	2.55
Do. maintaining road ".....	24.21
Do. operating ".....	35.75
Do. rep's of machin'y, eng's and cars ".....	12.23

GENERAL STATEMENT.

	Dr.	Cr.
Capital Stock.....		\$680,000 00
Funded debt, as follows:		
1st Mortgage Bonds.....	\$2,000,000 00	
2d ".....	300,000 00	
Real Estate.....	30,711 59	
		2,410,712 59
1st Mortgage, B. & N. Y. C. R. R., (between Buffalo and Attica).....		121,500 00
Earnings of transportation.....		541,249 60
Floating debt:		
Bills payable.....	\$66,274 98	
Pay rolls.....	67,949 53	
Individuals, (running accounts).....	117,917 50	
		252,142 01
Balance of transportation account for the 11 months ending Sept 30, 1858.....		141,096 77
		\$4,206,769 97
Dr.		
Cost of road and equipment.....	\$3,150,763 14	
First Mortgage Bonds on hand.....	228,800 00	
Rochester and Genesee Valley R. R. stock.....	150,000 00	
Buffalo & New York City R. R. Bonds.....	6,115 72	
Quincy & Toledo R. R. Bonds.....	8,084 99	
Coupon account, 1857.....	12,215 00	
Interest paid during the year.....	150,224 02	
Fuel and supplies on hand at this date.....	75,715 11	
Expenses of transportation.....	368,928 24	
Cash and cash items.....	53,864 75	
		\$4,206,769 97

DELAWARE TERMINUS OF THE PENNSYLVANIA RAILROAD.—We are informed upon good authority that the Board of Directors of the Pennsylvania Railroad Company, at their regular meeting yesterday, determined to adopt the route by the way of Prime street and Washington avenue to reach a Delaware terminus, thus affording an opportunity of extending their road up to Dock street along the Delaware front, if permission can be obtained from the city authorities, and at the same time placing the road in a position to afford increased facilities to trade by extending along the Delaware front both north and south. We understand that this conclusion was arrived at with almost entire unanimity, the site combining, as it is believed, the greatest advantages of economy of outlay in reaching the business portion of the city front on the Delaware, and securing ample depot property at a very moderate cost. The cars will cross the Schuylkill by the Gray's Ferry bridge. The erection of depots, &c., will be commenced forthwith.

IMPORTANT DECISIONS.

THE COUNTY TREASURY AND THE RAILROAD TAX.—We have already noticed the fact that an order issued out of the U. S. District Court in the case of G. W. Dobbin, commanding the Commissioners and Treasurer to pay the interest on certain railroad bonds held by Dobbin. We learn that Thos. Williams, Esq., and S. H. Geyer, County Solicitor, have given an opinion in the case that the county officers can not be required to pay until all the outstanding warrants and all the necessary expenses of county affairs shall have been first paid. The above gentlemen say in their opinion that the *current wants of the county must be provided for*. There is no escape from this. The policy of the law—the necessity of the government—the administration of justice itself—which is the primary object of the county organization, and is not to be sacrificed to any merely incidental or secondary consequence, or upon any consideration whatever—absolutely require this. It has been held accordingly in this state, in the case of the New Alexandria T. R. Company, that even a turnpike road could not be levied upon or sold, because the public had an interest in its use, and the same policy is now explicitly recognized in the act providing for the sequestration of the effects of merely private corporations. Where the public has an interest in the use, they must be kept in operation for their benefit, even though it require their whole revenue to keep them in repair. The case of a county is infinitely stronger, and the rule is necessarily the same. *Commonwealth vs. Commissioners, 2 Wharton 293.*

To suppose that the people who are its inhabitants can be thrust aside either for a railroad bondholder or any one else, is to suppose that the courts of justice may be closed, the county put under ban or interdict, and the whole government functions suspended, which would involve, not revolution, but anarchy, and stop all collections and all payments even at the treasury itself. This would be a new phase of the doctrine of outlawry which we doubt much whether any respectable court would venture to endorse, and none could ever successfully undertake to enforce. It assumes, moreover, that we have no grand juries and no means of self-existence and self-preservation inherent in our organization as a member of the State. It overlooks the many considerations which have been so singularly ignored in the short sighted attempt to turn political subdivisions into trading partnerships. In conclusion Messrs. Williams and Geyer declare that the question as to the obligation to provide in the first place for the current wants of the county, which are as essential to its life as food is to the individual, is too plain for serious argument.

ORDER TO PAY INTEREST ON RAILROAD BONDS.—On Wednesday morning in the Circuit Court of the United States, before Judge McCandless, Judge Shaler, attorney for plaintiff, asked the Court for the following order in the case of Dobbin vs. the County of Allegheny, on the judgment obtained at the November term, upon suit brought to recover interest coupons of the county issued to railroads. The order was granted.

George W. Dobbin } In the Circuit Court of the
vs. } United States, for the Western
The County of Allegheny. } District of Pennsylvania.
No. 11. November Term, 1859.

And now to wit: This 14th day of November, A. D., 1859, on motion of Charles Shaler, attorney for plaintiff, ordered that on the judgment, in this case, a writ issue, commanding the Commissioners of the said County of Allegheny to cause the amount of said judgment, with interests and costs, to be paid out of any moneys, unappropriated, of said county; and if there be no such moneys, out of the first moneys that shall be received for the use of said county. And that the Marshal make known, as aforesaid, as well to the said Commissioners as to the Treasurer of said county, and require the Treasurer of said county to pay the same judgment.

MONETARY AND COMMERCIAL.

Every body has been looking forward to the payments of the fourth with a good deal of anxiety, and almost every one has been making efforts for sometime past to be at least partially prepared for them, knowing very well the difficulties that would be likely to attend obtaining discounts at that time; and we incline to the opinion that there was not as much distress as was anticipated. Of course, money was close, as is always the case at this season of the year, perhaps closer than at any previous time during this unusually close season, but all seemed to be animated with a hope that we have now fully passed the culminating point, and that we have a high prospect ahead. Rates are without change, the regular houses charging their customers 10@12, and outsiders 15 to 18; street rates were stiff at 12@24. However, lenders consoled their victims that they would be able to charge them such rates for to-day (the 4th.) only, and that they thought things would be easier in a few days.

Eastern Exchange is firm at our quotations, and in but moderate supply. New York and Philadelphia checks are bought by bankers at $\frac{1}{2}$ Boston at $\frac{3}{4}$, Baltimore at $\frac{3}{4}$, and New Orleans at $\frac{1}{2}$ prem. We quote:

	BUYING.	SELLING.
New York Sight.....	37 prem.	$\frac{1}{2}$ @ prem.
Boston.....	30@37 prem.	$\frac{1}{2}$ @ prem.
Philadelphia.....	37 prem.	$\frac{1}{2}$ @ prem.
Baltimore.....	30 prem.	$\frac{1}{2}$ @ prem.
New Orleans.....	$\frac{1}{2}$ prem.	$\frac{1}{2}$ prem.
American Gold.....	37@40	$\frac{1}{2}$ prem.
Missouri funds are bought at $\frac{1}{2}$ dis., and Illinois Wisconsin and Iowa, at 2 dis.		

STATEMENT—Exhibiting the yearly expenses of the State Government of Ohio from 1848 to 1859, inclusive—showing the entire disbursements except for Schools and for Principal and Interest of Public Debt.

	1848 to 1851.	1852 to 1855.	1856 to 1859.
Total disbursements from 1848 to 1851, inclusive.....	2,955,103 80	3,758,511 64	4,606,929 19
Total amount disbursed 1852 to 1855 inclusive.....	3,758,511 64	4,606,929 19	5,491,116 30
To which add debts contracted in 1853 and paid in 1856.....	729,781 84	4,606,929 19	5,491,116 30
To which add debts contracted in 1853 and paid in the last four years.....	851,677 50	4,606,929 19	5,491,116 30
Total disbursements from 1852 to 1855, inclusive.....	2,955,103 80	4,606,929 19	5,491,116 30
Average yearly disbursements from 1852 to 1855, inclusive.....	738,775 97	1,151,732 82	1,372,779 18
Total amount disbursed 1856 to 1859, inclusive.....	5,491,116 30	6,929,000 00	8,093,305 54
Deduct debts contracted prior to 1853 and paid in the last four years.....	851,677 50	1,093,305 54	1,151,732 82
Total disbursements from 1856 to 1859, inclusive.....	4,639,438 80	5,835,694 46	6,941,572 72
Average yearly disbursements 1856 to 1859, inclusive.....	1,159,869 70	1,458,923 61	1,735,393 05

RECAPITULATION.

Total disbursements—		
1848 to 1851, inclusive.....	\$2,955,103 80	
1852 to 1855, inclusive.....	3,758,511 64	
1856 to 1859, inclusive.....	3,982,134 91	
Average annual disbursements—		
1848 to 1851.....	\$ 738,775 97	
1852 to 1855.....	1,095,824 95	
1856 to 1859.....	395,533 50	
A resume of the valuation and taxes of the State 1852 and 1859:		
General Summary of the Grand List of the State of Ohio for the years 1852 and 1859.		
	1852.	1859.
Number of Acres.....	24,413,630	25,320,842
Value of lands.....	272,378,744	\$438,439 600
Value of towns.....	81,558,574	155,674,404
Value of chattels.....	152,644,763	251,785,947
Total taxable valuation..	507,581,911	845,899,951
STATE TAXES.	Levy.	Levy.
	Mills.	Mills.
For Sinking Fund.....	\$1,015,163 82 $\frac{1}{4}$	\$1,055,119 78
Gen. Revenue Fund.....	567,581 91 $\frac{7}{10}$	590,870 39
State Com. Sch'l Fund ..	253,790 92 $\frac{1}{2}$	1,267,423 44
Dist. School Library.....	..... 1 10	84,944 99
Total State Taxes.....	1,776,536 68 $\frac{3}{11}$	2,997,918 60
COUNTY TAXES.	1852.	1859.
For County Expenses.....	\$983,501 95	\$1,305,095 60
For Bridge Purposes.....	135,617 04	392,403 37
For Poor Purposes.....	104,627 92	277,332 12
For Bldg Purposes.....	91,269 71	274,664 16
For Road Purposes.....	234,637 20	412,293 60
For Railroad Purposes.....	312,479 80	493,359 80
For County School Purposes.....	552,665 72	.....
Total County Taxes.....	2,414,799 43	3,151,139 74
OTHER LOCAL TAXES.		
For Township Expenses.....	\$268,556 51	\$309,635 07
For Special School and School Houses.....	193,768 10	1,440,249 73
For other Special Purposes.....	.....	245,660 57
For City, Town, and Borough Purposes.....	808,836 85	1,471,958 06
Total Taxes levied by City, Town, Township, and District Assessments.....	1,270,411 46	3,467,709 43
Grand Total County and other Local Taxes.....	3,685,210 89	6,618,843 17
Delinquencies and Forfeitures.....	212,567 94	428,556 45
Total of all Taxes except State.....	3,897,778 83	7,047,419 62
Total Taxes on the Grand List.....	3,674,335 51	10,945,338 22
Annual Report of the Comptroller of the Treasury to the Governor of the State of Ohio, for the year 1859.		
We give that portion of this document which seems of general interest to our readers. The following is the schedule of claims transferred to the Comptroller for collection, and by him placed in the hands of the Attorney-General:		
Acting Commissioner's check in favor of Paul, Chamberlain & Co., dated March 17, 1857.....	\$ 2,083 33	
Acting Commissioner's check, in favor of Paul, Chamberlain & Co., dated Feb. 14, 1857.....	2,083 33	
Balance due on Auditor of State's draft on the Treasurer of Henry County, for school land, section sixteen, irreducible, dated Nov. 10, 1857.....	450 00	
Certificate of deposit, Scioto Valley Bank, for taxes due from the Bank of Circleville, dated March 11, 1857.....	6,332 25	
Receipt of A. C. Warner to Wm. H. Gibson, Treasurer of the State, borrowed money, dated Nov. 24, 1856.....	270 00	
Receipt of A. A. Spayth to Wm. H. Gibson, Treasurer of State on account of salary as Registrar, dated April 22, 1857.....	100 00	
Auditor of State's draft on P. Rose, dated Sept. 4, 1854, on account of convict labor in the Ohio Penitentiary.....	9 20	
Auditor of State's draft on Wm. Burdell, on account of convict labor in the Ohio Penitentiary.....	139 20	
Auditor of State's draft on W. T. & S. D. Day & Co., for convict labor in the Ohio Penitentiary, dated May 5, 1858.....	383 20	
Auditor of State's draft on W. T. & S. D. Day & Co., for convict labor in the Ohio Penitentiary, dated June 4, 1857.....	198 60	
Balance due on drafts, on same parties, for the same purpose.....	8 50	
Auditor of State's draft on Baughman & Stotts for convict labor in the Ohio Penitentiary, No. 299, dated February 3, 1858.....	\$ 5 40	
Auditor of State's draft on Baughman & Stotts for convict labor in the Ohio Penitentiary, dated Nov. 4, 1857, No. 269.....	268 20	
Auditor of State's draft on Baughman & Stotts for convict labor in the Ohio Penitentiary, dated December 14, 1857, No. 280.....	218 15	
Auditor of State's draft on Baughman & Stotts for convict labor in the Ohio Penitentiary, dated January 5, 1858, No. 287.....	165 45	
Auditor of State's draft on Baughman & Stotts for convict labor in the Ohio Penitentiary, dated October 5, 1858, No. 301 (less \$59 25 paid December		

27, 1857).....	142 05
Total due from Baughman & Stotts	759 65
(Less \$240 paid Oct. 2, 1859).....	519 65
Auditor of State's draft on the Treasurer of Preble County for School Lands, Section sixteen irreducible, dated June 5, 1858, balance due.....	\$ 104 00
Memorandum of advances to Mr. Lenox, on State House, December 2, 1856.....	2,482 85
Memorandum of advances to R. Platt, on State House, December 2, 1856.....	1,931 54
Agreement of Daniel Beckel, "Dayton Bank Claim"—balance due.....	34,000 00
Auditor of State's draft on Cooper, Doyle & Foster, for National Road, June 11, 1858.....	3,052 50
Auditor of State's draft on Cooper, Doyle & Foster, for National Road, December 8, 1857.....	3,052 50
Auditor of State's draft on Cooper, Doyle & Foster, for National Road, December 31, 1856.....	3,052 00
Auditor of State's draft on Cooper, Doyle & Foster, for National Road, December 31, 1856.....	3,052 50
Receipt of H. S. Knapp to Wm. H. Gibson, on acct salary, March 19, 1859.....	215 00

Total amount of claims received from Treasurer of State.....	\$63,440 65
Claims on S. Medary, being for balance of account as Commissioner of State House, and check on Clinton Bank, received from Acting Commissioner of State House.....	1,451 39
Claim on H. W. Derby, being Geo. H. Bronson's draft on him in favor of Secretary of State, received from Secretary for collection.....	1,488 00

Total.....	\$66,380 04
There have been collected and certified into the Treasury, during the past fiscal year, on account of the foregoing claims, the following sums, namely:	
Agreement of Daniel Beckel, "Dayton Bank Claim,".....	\$5,386 65
Certificate of deposit, Scioto Valley Bank, for taxes due from Bank of Circleville dated March 11, 1857.....	5,322 25
Balance due on Auditor's of State's draft on the Treasurer of Henry County for school land, section sixteen, irreducible, dated November 10, 1857.....	450 00
Auditor of State's draft on Cooper, Doyle & Foster, for National Road.....	2,581 92
	\$14,760 82

The Comptroller concludes his report with the following remarks:

The claim purporting to be on H. W. Derby, consists of a draft on him made by Geo. H. Bronson, in favor of James H. Baker, late Secretary of State, for \$1,488. Payment was demanded of Mr. Derby, and by him refused on the alleged ground that Bronson had no authority to make the draft. The claim was therefore lodged with the Attorney General, in order that, so far as practicable, the rights and remedies of the State, whatever they may be, may be protected.

Annual Report of the State Treasurer of Ohio.—This document is dated at the Treasury Department, Nov 15th, 1859:

In compliance with the laws governing this Department, I have the honor to submit to you the following report of the Receipts, Disbursements, etc., for the year ending November 15, 1859.

GENERAL REVENUE.

Balance in Treasury Nov. 15 1858.....	\$136,031 93
Taxes collected and paid in by counties.....	613,701 03
Receipts from bank taxes, convict labor and other items.....	143,374 68
Total receipts, etc.....	884,107 64

DISBURSEMENTS.

By amount of Auditor's drafts redeemed from Nov. 15, 1858, to Nov. 15, 1859.....	782,515 74
--	------------

Balance Nov. 15, 1857.....	\$101,592 90
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CANAL FUNDS.

Balance in Treasury Nov. 15, 1859.....	\$6,873 82
Received from Ohio Canal.....	71,442 64
" " Miami & Erie Canal.....	114,237 75
" " Muskingum Improvement.....	18,274 61
" " Hocking canal.....	17,301 22
" " Walhonding canal.....	475 56
" " Western Reserve & Maumee Road.....	2,187 00
" " Sale of Canal lands.....	516 18
" " National Road.....	5,551 36
" " A. G. Conover.....	9,900 50
" " F. M. Wright, Auditor.....	20 80

Total.....	\$246,781 44
------------	--------------

DISBURSEMENTS.

By amount of Auditor's drafts redeemed from Nov. 15, 1858, to Nov. 15, 1859.....	\$326,922 31
Expenses over receipts.....	\$90,200 89
Total balance in general revenue, Nov. 15, 1859.....	\$11,391 03

STATE COMMON SCHOOL FUND.

Balance in Treasury, Nov. 15, 1858.....	\$16,154 69
Taxes collected and paid in by counties.....	1,348,797 42
Total.....	\$1,364,952 11

DISBURSEMENTS.

Paid Auditor's drafts to County Treasurers.....	\$1,212,232 80
---	----------------

Balance in Treasury, Nov. 15, 1859.....	\$52,719 31
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DISTRICT SCHOOL LIBRARY FUND.

Balance in Treasury, Nov. 15, 1858.....	\$3 28
Taxes collected and paid in by counties.....	80,173 07

DISBURSEMENTS.

Paid Auditor's drafts, redeemed from Nov. 15, 1858, to Nov. 15, 1859.....	79,579 95
---	-----------

Balance in Treasury, Nov. 15, 1859.....	\$593 12
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RECAPITULATION.

Showing the amount received from each source of revenue and on what account disbursed.

General revenue.....	\$884,107 64
Canal fund.....	246,781 44
Sinking fund.....	1,096,174 59
State common school fund.....	1,264,952 11
District school library fund.....	80,173 07
Section 16, irreducible.....	84,014 93
Canal, turnpike and railroad dividends.....	36,213 75
Sinking Fund Commissioners undrawn interest.....	28,012 45
Surplus revenue—principal.....	7,133 72
Surplus revenue—interest.....	7,639 10
Virginia military school fund—irreducible.....	4,563 65
Section 29—irreducible.....	2,103 61
J. M. Armstrong, Receiver, Canal Bank, Cleveland.....	2,169 18
Lands sold by fund commissioners.....	1,008 41
Ohio railroad company.....	400 00
Decree against G. Washington.....	398 76
Interest on foreign debt, refunded by J. G. King & Son.....	100 00
R. H. Gilson, late land commissioner.....	16 25
Western Reserve school fund—irreducible.....	12 35
Three per cent. fund.....	19 04
Total receipts.....	\$3,746,272 22

DISBURSEMENTS.

General revenue.....	\$782,515 74
Canal fund.....	339,682 31
State common school fund.....	1,212,232 80
Interest on foreign debt.....	893,070 57
Interest on domestic debt.....	18,216 75
Interest on section 16.....	114,194 44
Interest on Va. military school fund.....	12,808 36
Interest on the Western Reserve school fund.....	15,331 98
Interest on section 29.....	3 95 35
Interest on U. S. military fund.....	7,216 23
Interest on Moravian school fund.....	189 63
Purchase of foreign debt.....	62,538 14
Expenses of sinking fund commissioners.....	19,620 95
Ohio University fund.....	113 34
Samuel Perrin's claim.....	1,300 00
Vault in fund commissioner's office.....	2,134 61
District school library fund.....	79,579 95
Total disbursements.....	3,552,995 35
Total balance in Treasury proper, Nov. 15, 1859.....	\$193,276 87

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned

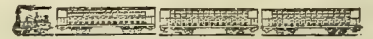
THEODORE DEHON,
at Broadway, New York

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
No. 67 est 6th St. bet. Walnut & Vine
CINCINNATI O

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANOR SANDOVAL

FOR

Decatur, Springfield,
Bloomington, Peoria,
Burlington, Quincy,
La Salle, Rock Island,
Dixon, Galena,
Prairie du Chien, St. Paul, and
St. Anthony,
And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANA for all the above points.
Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all TOWNS ON THE UPPER MISSISSIPPI.

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,
Gen'l Southern Agent, Cincinnati.
W. P. JOHNSON,
Gen'l Passenger Agent, Chicago.

Winter Arrangement, 1859-'60.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the West, South-West and North-West.

TWO TRAINS

Leave Wheeling daily at 12:55 P. M., and 10:10 P. M.
One Train leaves Parkersburg daily at 9:20 P. M.
Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.
Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2.

Time as quick and Fare as low as by any other ROUTE.

Inquire for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

E. F. FULLER,
General Western Agent.
L. M. COLE,
General Ticket Agent.
W. P. SMITH, Master Transportation.

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circular which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the retort is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet,.....	\$300 00
do do do 350 "	335 00
do do do 400 "	375 00
do do do 500 "	450 00
do do do 600 "	525 00
do do do 700 "	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft. 1 in.
3500	175	20 ft. 6 in.	11 ft. 9 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, as now in operation in several States, apply to

R. T. COVERDALE,

167 Walnut Street, Cincinnati, Ohio,
who has the exclusive right to manufacture and sell in the State of Ohio.
Feb. 24th, 1859.

APPLEGATE & CO.,
Booksellers, Publishers, Stationers & Blank
Book Manufacturers,
43 Main St. Cincinnati O.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-Book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Booksellers, Country merchants, and others to our extensive stock of, Theological, Standard, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the publishers, as well as the principal manufacturers of Paper and Stationery, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

BOOKSELLERS,

Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, and Tea wrap-boards, Envelopes, Penholders, Copying Books, Ink and saucers, Sealing Slates, Mucilage, Book rests, Bill envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files; Date Calendars, together with all other articles used in the counting-house.

Stationers,

To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly pagged, including all sizes, from the small memorandum book to the large Super-Royal Ledger, and variety of styles workmanship, order of any description, with or without ruling and durability of binding: all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

BLANK BOOK MANUFACTURERS,

We are prepared to Print and Bind books of any description and in any style desired, at rates as low as quality of work cut in this where. Our executing these the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Dray receipts, Cards, Circulars, or other description of printing, will that we do such jobs despatch. Orders re-

Stereotype, of any description that may be done as the same can be executed or else facilities for branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Dray receipts, Cards, Circulars, or other description of printing, will that we do such jobs despatch. Orders re-

Publishers

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, *Clarke's Commentaries*, *Dick's Works*, *Rollin's Ancient History*, *Plutarch's Lives*, *Josephus*, *Spectator*, *Chain of Sacred Wonders*, *Familiar Science*, *Webb's Monitor*, *Soden's German*, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

43 MAIN STREET, CIN.

W. HARVEY'S SAFETY JOINT

For Coupling the Ends of "T" Rail
PATENTED, NOV. 2, 1858.

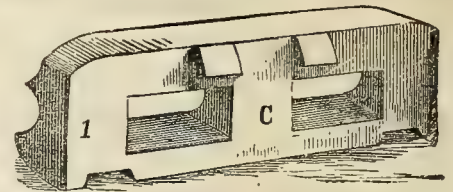


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outside side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

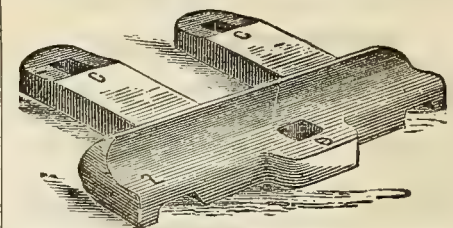
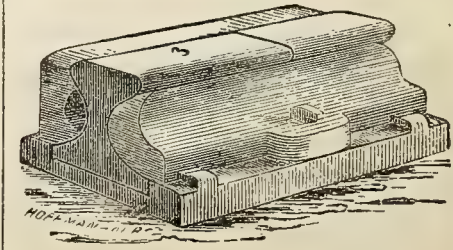


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that one part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly safe road, thereby doing away with the breaking of rails, wheels and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear of the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
41 Jefferson street, Albany, N. Y.
ON AGENT, Cincinnati O.

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

Sole Importers.
PROSSER'S PATENT SURFACE CON-
DENSERS for high pressure steam, with sea or
other bad boiler water, gauges, 3 cutter drills, counter-
sinks, tube end cutting bars, expanders, tube scalers,
steel wire and whalebone brushes, pull lever wrenches,
tubes—plain or enameled, screwed together for Artesian
Wells, Hollow Slabs for various purposes, Steel for
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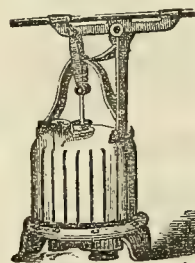
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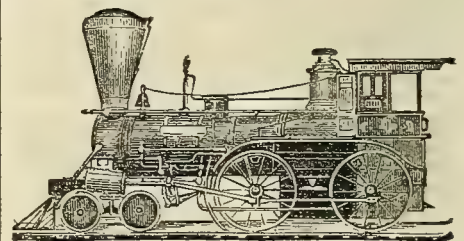
New Time Table

OF THE

NEW YORK CENTRAL R. R.

	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp.	7.00 A. M.	7.00 P. M.	7.00 P. M.
Mail	9.40 A. M.	12.50 A. M.	
New York Exp.	11.15 A. M.	9.00 P. M.	9.00 P. M.
Night Exp.	5.00 P. M.	4.00 P. M.	4.00 A. M.
Utica Accom'n.	6.00 P. M.	Ar. U. 10.00 P. M.	
N. Y. Mail	11.15 P. M.	10.01 A. M.	10.00 A. M.
	Leave Buffalo.	Leave Bridge.	Ar. Albany
New York Exp.	5.15 A. M.	5.15 A. M.	3.30 P. M.
Steamboat Exp.	8.00 A. M.	8.00 A. M.	8.00 P. M.
Mail			2.30 P. M.
Cleveland Exp.	6.00 P. M.	6.00 P. M.	4.40 A. M.
Cincinnati Exp.	11.00 P. M.	11.00 P. M.	8.30 A. M.
Utica Accom'n.			10.00 A. M.

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P. DUDLEY,

President of the Board,

Jan 5th.

The Railroad Record.

E. D. MANSFIELD,
T. WRIGHTSON. { Editors.

CINCINNATI:

Thursday Morning, Jan. 12, 1860.

THE RAILROAD RECORD,

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THE European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

THE WORLD WE LIVE IN—Is the title of a new paper issued by B. F. Sanford, Esq., of this city. Mr. S. is already well known to the agricultural portion of the Ohio Valley, as the Editor of the deservedly popular "Ohio Valley Farmer." The new issue is printed with new type and on fine paper, and is a good specimen of newspaper typography. Its reach and aim is to fill a vacuum in the family circle with good and useful miscellaneous reading, to improve the heart and strengthen the morals of the rising generation, and give a zest for family culture. Mr. S. seems to have a bent on the thing, hence we doubt not of his success.

PIKE'S PEAK PRICES.—It may be interesting to parties who contemplate emigrating to the gold region, and haven't much of the spelter to travel on, to first learn what it will cost to live when they get there. The following is the latest report.

At Denver City, flour from the States sells at \$16 per 100 pounds; that from New Mexico at \$1 less. Corn meal is retailed at 12½ cents per pound; bacon at 25c.; lard 30c.; butter \$1 per pound, and milk at 15c. per quart. Molasses and whiskey each bring \$3 per gallon. Corn, shelled 10c. per pound. Lumber \$60 per thousand. Nails from 30 to 60c. per pound; bread 15c. per pound; fresh beef 10c. per pound, and tallow 50c. The cheapest articles in the market are venison and gold dust; the former bringing \$1 per quarter, and the latter selling at a drink of whiskey per pinch.

VALUATION OF REAL ESTATE IN OHIO—CITY PROPERTY.

Most of our readers are aware, that in 1859, a new valuation was made of the real estate of Ohio. This takes place once in six years; and thus an opportunity is afforded of comparing the value of property in different periods. The last appraisement, previous to this, took place in 1853, and showed an immense advance in values. So, also, did that of 1847. This one of 1859, however, shows only a comparatively small advance. There is an advance; but, it is quite moderate. In some parts of the State, especially, the fast growing towns, have really fallen off. It will be instructive to note the facts, in this case, and the causes of them. We take our notes from the county appraisements, which will be changed considerably, as to each other, by the Boards of Equalization, but are sufficiently near to illustrate the general change which has taken place, in the last ten years. Below we give the valuations of the principal towns (in real estate,) of Ohio in 1853 and 1859:

	1859.	1853.
Cincinnati.....	\$62,809,120	\$56,275,420
Hamilton.....	1,361,951	1,363,114
Springfield.....	1,549,278	1,227,382
Cleveland.....	14,157,711	16,696,202
Sandusky.....	1,005,695	1,662,966
Columbus.....	4,527,284	6,934,117
Xenia.....	934,700	785,001
Steubenville.....	841,130	535,405
Mt. Vernon.....	682,301	656,059
Painesville.....	730,651	453,600
Ironton.....	858,546	956,265
Newark.....	3,299,030	1,547,590
Toledo.....	596,350	411,680
Pomeroy.....	873,320	867,977
Lancaster.....	5,761,804	5,309,928
Dayton.....	954,605	1,144,583
Zanesville.....	822,685	840,483
Mansfield.....	1,577,690	1,711,189
Chillicothe.....	1,294,253	1,259,187
Portsmouth.....	518,292	613,110
Akron.....	1,076,634	1,055,041
Marietta and Harmer.....		

Aggregate.....\$102,902,329 \$103,919,224

Here are twenty-two of the largest towns in Ohio, in which property is at a stand still, showing a very small decrease. Of these towns, twelve, viz.: Cincinnati, Springfield, Xenia, Mt. Vernon, Painesville, Ironton, Toledo, Pomeroy, Lancaster, Dayton, Portsmouth, and Marietta, have increased; but, most of them a very small increase. On the other hand, ten towns, viz.: Hamilton, Cleveland, Sandusky, Columbus, Steubenville, Newark, Zanesville, Mansfield, Chillicothe, and Akron, have diminished in value. Upon this statement one is inclined, at first, to look with astonishment; for the State (the rural districts,) have increased in value; and these towns which have diminished are among the most valuable in the State. Such, however, is the fact, and we may well inquire into its causes.

The general cause is undoubtedly the two financial crisis of 1854 and 1857. The former immediately followed the speculative year 1853, when that appraisement was made, property was highest; the last had just brought about its full effect, in the reduction of prices, when this appraisement was made. This valuation, therefore, represents the lowest point

at which property is likely to be in many years. Notwithstanding this, it must be regarded as rather extraordinary, that the large towns should present such an appearance of depression, in the value of property. Here, we must say, that the distribution of Railroads, which is materially changed since 1853, has had no small influence on this depression. Let us take, for example, two classes of these towns:

1. The towns of Cleveland and Sandusky have diminished, in value, \$3,300,000.

2. Cincinnati and Toledo and Dayton have increased \$8,500,000.

3. The towns in the central part of the State have generally diminished in value.

On this state of facts, we remark, that in 1853, railroads had done all for Cleveland and Sandusky they could do, and to speak paradoxically, more than they could do properly. Cleveland then had the great Cincinnati and New York Line, and the Pittsburg Line, and was receiving from the interior all of produce and passengers which the interior could furnish. Now, it is quite obvious, that lines made all along the Lake, which should place Toledo on the same level, for transit lines, carrying produce from the West, with Cleveland, that some diversion of business would be made to Toledo. So also of Sandusky. While no lines of Railroad centered at Toledo, and Sandusky had the benefit of the Mansfield and Mad River Lines, a large part of the produce from the interior of Ohio went to Sandusky. Steamboats flocked there for produce, and the town grew rapidly. Hence, Sandusky has suffered a depreciation of forty per cent. in the value of property.

In the meantime, we find that six years has doubled the value of property at Toledo.

When we look now to the river towns, and Miami country, we find that Railroads had not been arrested in 1853, nor that the new ones diverted business. The very contrary was the fact. Since 1852, the Ohio and Mississippi Railroad has been made; the Cincinnati and Marietta, and the completion of several others. So far as the distribution of railroads affected property, the changes which took place between 1853 and 1859 were against Cleveland and Sandusky, and in favor of Cincinnati and Toledo. We mention this as one obvious cause of these differences.

But, a third cause, and in regard to Cleveland and Sandusky, perhaps, the most powerful, is the great diminution of the wheat crop, in those counties of Ohio, whose produce was mainly deposited at Cleveland and Cincinnati. This diminution, since 1853, has been very great; and so has that of many other agricultural products. As we have remarked, the value of farm lands has decidedly increased, and stand in contrast with that of towns. We take some counties at random:

	1853. Per Acre.	1859. Per Acre.
Pickaway.....	\$23 72	\$29 81
Preble.....	21 89	32 81
Richland.....	15 91	22 22

Sandusky.....	9 32	13 47
Stark.....	24 41	29 35
Warren.....	31 10	38 26
Williams.....	4 35	7 62
Wyandot.....	10 87	13 26
C. emont.....	23 48	29 66
Columbiana.....	20 85	22 87

This little table shows that the rise in the price of agricultural lands has been, in six years, about twenty-five per cent. On the other hand, the town property stands still. This proves that the deficiency of crops has had less influence on the value of land, than some persons have supposed. The fall, in certain towns, is due mainly to the competition or diversion in railroad business.

CHANCES OF LIFE.

The companies who make Life Insurance, and grant annuities, have for more than a hundred years been endeavoring to make tables, which shall ascertain precisely the chances, or, rather *probabilities* of life. These tables are never precisely accurate; for it is impossible to make them so. But they do *approximate* accuracy. There are two very interesting questions connected with this table. 1st what at a given period is the probabilities of life? 2d at what period is the actual life, and the probability, the greatest taken together? That is *when* is the probability of a long life the greatest? In the table adopted in France we find the answers to these problems stand thus: The greatest *probability* of a continued life is at *seven years of age*. The reason is not obscure. *Half* that are born into the world die before seven years. By far the greatest dangers of the loss of life are passed before that period. After that, few deaths occur during the next septennial. Then when the age of puberty is passed the dangers to life reappear, but by no means in so great a degree, as in infancy. The probability of living past any particular and immediate danger increases as life passes along; that is, the more of these dangers are passed, the less probability there is that any of them will overtake the person, till we come to old age. Thus the answer to the second problem, *when* is the probability of life being very long, the *greatest* is the greatest when the person is the oldest; for example, the following gives the probabilities of life being the greatest, at successive periods.

AGE.	PROBABILITY.	TOTAL.
7.....	42 years.....	49
14.....	37 ".....	51
28.....	29 ".....	57
35.....	25 ".....	60
42.....	20 ".....	62
49.....	17 ".....	66
55.....	14 ".....	69
60.....	11 ".....	71
65.....	8 ".....	73
70.....	6 ".....	76
75.....	4 ".....	79
80.....	3 ".....	83

One curious fact will be seen, in this table, that *life* increases faster than the *probabilities* of life diminish. If this principle were continued indefinitely, it would result in making men immortal on earth! But, this table being carried no further than 80 years does not determine very accurately the laws of life at extreme old age. After 80 years, life drops off

very rapidly, although, there are numerous examples in modern times of men attaining the age of 120 years, the age of Abraham; and the number who live over 80 years, in a country like the United States, amounts to thousands. Human life, therefore, is very various in its limitation. To what cause is that due? Is it vitality? or, is it the difference of habits?

VIRGINIA RAILROADS.

Governor WISE, of Virginia has said some things liable to censure, but his recommendations of Railroads are judicious, and should be carried out. He recommends, among other things, the completion of the Covington and Ohio Railroad.

It ought, he says, to be completed in the shortest possible time, and in this we perfectly agree. He recommends the appropriation of \$2,000,000, for the present year, and for two years the following appropriations, viz:

Covington and Ohio Railroad.....	\$4,000,000
Manassas Gap.....	200,000
Danville.....	200,000
Other works.....	600,000
Aggregate.....	\$5,000,000

The *Covington and Ohio Road* is one of the greatest importance to Virginia. It will at once be united with the Ohio Roads, by a branch, from or near Gallipolis, and Virginia will find, that an immense amount of Western produce will seek that direction; and descend into, and through Virginia.

The total *receipts* of the Virginia Roads, in the last year were \$2,500,000 an amount, which seems encouraging, and proves, that Virginia is a State well adapted to this species of improvement.

THE HISTORY, AND METEOROLOGY OF TREES.

The following comes from the *Zeitung* a paper in Texas, and is quite curious.

A tree bears its own history written in itself, and this is most intimately connected with the yearly fall of rain. Water is a main element in the development of plants; without it, their growth is impossible. With a sufficiency of moisture they arrive at their maximum of growth; that wanting the growth is relatively retarded. We can accurately follow the growth of a tree from its earliest state to its present perfect condition. We trace its yearly growth by annual rings, whose size mainly depends upon the supply of water, so that the broad rings indicate the wet years, and the thin rings, which can scarcely be distinguished by the naked eye, denote dry ones. This theory should govern our researches into the past. Great care is necessary in the selection of trees for this experiment. We may be misled by trees upon which abnormal conditions have been developed. In my experiments I demanded two requisites: first, a high, isolated position, so that the drouth has an early effect upon the trees: and secondly, sound, healthy

trees. I felled three post-oaks—two somewhat over 130 years old. I took from each, at the thick end, a verticle section, planed the surface very smooth, and then varnished it over, which made the annual rings distinctly visable, (fat has the same effect,) and I prepared from each section a table of the relative order and position of those rings. Upon comparing these three tables, they were found to correspond exactly—a proof that moisture is the only cause of this difference in the size of these annual rings.

His tables go back to 1724, and from the size of each ring he judges wheather the season in which it was formed was dry or moist; the small rings being set down for the dry, and the larger ones, for the moist seasons. By this test there have been 67 wet summers during the past 133 years, in western Texas, and the rest of the years are divided into dry, very dry, and average seasons.

PENNSYLVANIA.

MESSAGE OF GOV. PACKER.

The Governor of Pennsylvania gives the following favorable exhibit of the finances of his State in his Annual Message. We also give a few extracts from the document in relation to Railroads:

The receipts at the State Treasury, from all sources on the fiscal year ending on the 30th of November, 1859, were \$3,826,350 14, to which add balance in Treasury, December 1, 1858, \$892,027 76, and it will be seen that the whole sum available for the year, was \$4,718,377 90. The expenditures, for all purposes, during the same period, were \$3,879,054 81. Leaving an available balance in the Treasury, on the 1st day of December, 1859, of \$839,323 09. Included in the expenditures for the fiscal year, are the following sums, viz:

Loans redeemed.....	\$840,302 30
Relief notes canceled.....	4,137 00
Interest certificates paid.....	4,843 30
Making of the public debt actually paid, during the year, the sum of.....	849,282 60

The funded and unfunded debt of the Commonwealth on the 1st day of December, 1858, was as follows:

FUNDED DEBT.

6 per cent. loans.....	\$445,180 00
5 ".....	32,430,905 67
4½ ".....	388,200 00
4 ".....	100,000 00

Total funded debt.....\$30,954,285 67

UNFUNDED DEBT.

Relief notes outstanding.....	\$105,350 00
Interest certificates.....	23,357 12
" unclaimed.....	4,448 28
Domestic creditors.....	802 50

Total unfunded debt.....\$133,958 00

Making the entire debt of the Commonwealth, at the period named, \$39,488,243 67.

The funded and unfunded debt of the State, at the close of the last fiscal year, December 1, 1859, stood as follows:

6 per cent. loans.....	\$400,630 00
5 ".....	37,625,133 37
4½ ".....	358,200 00
4 ".....	100,000 00

Total funded debt.....\$38,513,963 37

Relief notes in circulation.....	\$101,213 00
Interest certificates outstanding.....	18,513 82
" unclaimed.....	4,448 38
Domestic creditors.....	802 50

Since the close of the fiscal year the Commissioners of the Sinking Fund have redeemed of the five per cent. loans, the sum of \$160,000, leaving the real debt of the Commonwealth, at this time, funded and unfunded, \$38,478,961 07. If we deduct from this sum the amount of the bonds received by the State, from the sale of her public works, and now held by her, as follows:

Total.....\$11,081,000 00
we have \$29,397,961 07, the remaining debt
of the Commonwealth, the principal and in-
terest to be provided for, from the ordinary
sources of the revenue.

When it is remembered that during this period the law reducing the State upon real and personal estate, from three to two and a half miles, had been in full force, and that nothing for the last year has been received from the Pennsylvania Railroad Company, on account of tax on tonnage, making the receipts from those two sources of revenue, less by four hundred thousand dollars, than they were for the preceding year, it is a source of congratulation that under such circumstances, a result so favorable has been produced by the ordinary operations of the Treasury.

Having ceased to be interested in ordinary business pursuits, it is her plain duty to devote her best energies to relieving her people from the burden of an onerous debt. When this great result shall have been accomplished, the necessary expenditures of an economical administration of the government, can be readily met without the imposition of a State tax on real or personal estate—the remaining sources of revenue being more than sufficient for all legitimate purposes. Until that end, so anxiously looked to, is secured, true wisdom, as well as sound policy, dictates that our resources should be carefully husbanded—that none of our present sources of revenue should be cut off, or diminished—that all the departments of government should consult a proper economy—that all extravagant and unnecessary appropriations should be avoided—and that every new scheme for embarrass-

Encouraging, as are the results of the past two years, it must not be forgotten, that we have but just commenced the payment of the principal of our debt; and that to prevent a misapplication of the public finances, and thereby insure a continuance of its reduction, from year to year, is manifestly the first duty of those placed by the Constitution in charge of the Public Treasury, and to whom belongs the exclusive right of raising, economizing and appropriating the public revenue. I earnestly commend this whole subject to the careful attention of the Legislature—entirely satisfied, that, as it is the most vital of all the interests committed to the charge of the General Assembly, it will receive that consideration which its importance so eminently demands.

The railroad company has also become entitled to, and has received one million of dollars of the mortgage bonds referred to in the sixth section of the same act, leaving mortgage bonds amounting to two and a half millions of dollars, still remaining in the Treasury of the Commonwealth, to be delivered to the company, "from time to time, *pari passu*, with the progress of the work, as ascertained by the returns and estimates of the chief engineer of the said company." When the bonds last mentioned shall have been surrendered to the company, as directed by law, the State will still hold as absolute owner, three and a half millions of dollars of the mortgage bonds of the company, payable in the year 1872, and in the six succeeding years, as mentioned in the act of Assembly, with interest at the rate of five per centum per annum, payable semi-annually on the thirty-first days of January and July of each year. Interested as the Commonwealth is, in the early completion of this important thoroughfare, it affords me great pleasure to be able to inform the General Assembly that the progress of the work for the past year has been highly satisfactory.

The Eastern division of the Road, extending from Sunbury, in the county of Northumberland, to Whetham in the county of Clinton, a distance of eighty-one miles, is finished; passenger and freight trains passing over it daily. The Western division, extending from the city of Erie, to the borough of Warren, in Warren county, a distance of sixty-six miles, is, also, completed, with regular passenger and freight trains now running over it daily. Making one hundred and forty-seven miles of railroad along the line of the route, that have been already brought into practical operation—one hundred and seven miles of which, exclusive of sidings, were finished during the past year on the intermediate portion of the line, between the borough of Warren and Whetham station, a distance of one hundred and forty miles, ninety-five and half miles are graded, leaving but forty-four and a half miles yet to be graded, to place the whole of the unfinished portion of the road in a position to receive the superstructure. If no untoward event shall delay

By the twenty-second section of the Act approved the 13th day of April, 1846, entitled "An Act to incorporate the Pennsylvania R. R. Company," it is provided, "that all tonnage, of whatever kind or description, except the ordinary baggage of passengers, loaded or received at Harrisburg, or Pittsburg, or at any intermediate point, and carried or conveyed on or over said railroad, more than twenty miles, between the 10th day of March and the 1st day of December, in each and every year, shall be subject to a toll or duty for the use of the Commonwealth, at the rate of five mills, per mile, for each ton of freight carried between the 20th and 30th days of July, and between the 1st and 10th days of December, in each and every year, after thirty miles or more of said railroad shall have been completed and in use, to cause to be made out and filed with the Auditor General a true and correct statement, exhibiting the amount of said tonnage, so loaded or received and the distance so carried and conveyed, during the respective periods intervening between the said 10th day of March and the 20th day of July, and between the said 20th day of July and the 1st day of December in each and every year; which said statement shall be verified by the oath or affirmation of the receiving or forwarding agent or agents, or other proper officer or officers of said company, having a true and correct knowledge of the premises; and at the time of filing said statement, or on or before the said 30th day of July, and the 10th day of December, in each and every year, the said Company shall pay to the State Treasurer, the amount of said toll or duty, so accruing for the use of the Commonwealth, during the respective intervening periods before mentioned." And in a supplement to the act just referred to, passed on the same day, it is further provided, "that in case the said company shall, at any time, fail to pay the toll or charge on tonnage, which may accrue, or become due to the Commonwealth, under the provisions of said act, the same shall be and remain a lien on the property of the said company, and shall have precedence over all other liens or incumbrances thereon until paid." By the act of the 27th of March, 1848, the tax on tonnage of five mills per ton, per mile, from the 10th of March to the 1st of December, was commuted to a tax of three mills per ton, per mile, during the whole year. Subsequently, by the act of the 7th of May, 1855, lumber and coal were made exempt from the tonnage tax.

For the fiscal year ending Nov. 30, 1851.....	\$7,521 93
“ “ “ 1852.....	16,680 49
“ “ “ 1853.....	65,228 59
“ “ “ 1854.....	112,880 50
“ “ “ 1855.....	129,230 56
“ “ “ 1856.....	226,018 51
“ “ “ 1857.....	179,933 75
“ “ “ 1858.....	292,363 02

On the 21st of February, 1859, an account was settled, by the Auditor General, against the company, for the tax on tonnage, from the 21st day of July, to the 30th day of November, 1858, inclusive, amounting to the sum of \$87.-

375 22. From this settlement, the company, on the 19th day of April, took an appeal to the Court of Common Pleas, of Dauphin county; and, in the specifications of objections which were filed, it was averred that the tax was unconstitutional, and an opinion to that effect, signed by eminent counsel, was filed in the office of the Auditor General, at the time the appeal was entered. In August last, the cause was tried, and after a full investigation, and argument, the constitutionality of the law imposing the tax was affirmed by the Court, and a verdict and judgment rendered in favor of the Commonwealth, for the amount claimed, with interest. The case has since been removed by a writ of error, to the Supreme Court of the State, and will, probably, be heard and determined, by that tribunal, in the course of the present winter.

On the 25th day of August last, another account was settled against the Company, for the tax on tonnage, from the 30th day of November, 1858, to the 20th day of July, 1859, amounting to the sum of \$159,368 58, from which an appeal has also been taken by the railroad company, and which will probably be tried during the present month.

As this question largely affects the revenues of the Commonwealth, and as the principal involved is one of the first importance, I have deemed it a duty to lay before the General Assembly, somewhat in detail, the history of this tax, and the present condition of the legal controversy growing out of its imposition and enforcement. It will be observed, that the power of the State to grant chartered rights, and corporate privileges, to a railroad company, upon the condition that it shall pay to the Commonwealth a portion of its earnings, in the shape of a fixed tax upon the freight carried over the road, is questioned by the company, and that, too, after the grant has taken effect, and while the corporation is in the full enjoyment of all the benefits conferred upon it by its charter. The question, it is true, is a legal one, and its decision, therefore, rests with the judicial department of the government; but, I have not the slightest doubt, that the decision, when had, will entirely vindicate the right of the government to impose the tax, and to compel corporations of its own creation to obey the law from which they derive their existence. When it is remembered, that the tax was originally imposed, in order to indemnify the State, to some extent, for losses which she was sure to sustain from a competition, which was inevitable, between the railroad authorized and her main line of public works; and that this competition did, not only seriously affect the revenues of the Commonwealth, derived from her public improvements, but ultimately induced the sale of the main line to the railroad company itself at a price many millions of dollars below what it would have produced, in the absence of such competition, it is certainly not to be presumed that the Commonwealth will willingly yield her demand for revenue from this source, until she is, at least, fully indemnified for the pecuniary injury sustained in the depreciation of her own property, by her liberality extended to the company which now denies her power to enforce a contract, voluntarily entered into, upon a consideration entirely adequate.

The earnings of the Ohio and Mississippi Railroad for the month of December, 1859, were:

Passengers, etc., 1859.....	\$126,666 23
1858.....	104,030 98
Increase.....	\$22,035 25

CENTRAL R. R. & BANKING CO. OF GEORGIA.

The earnings and expenditures of the road, ending 30th ult., are shown in the Superintendent's report. The increase in every item, whether freight or passage, is large, and the expenditures—ordinary and extraordinary—are moderate. The result must be altogether satisfactory to the stockholders.

The cash received from road and bank has been as follows:

From road.....	\$1,645,554 09
From bank.....	21,080 72

Total.....\$1,726,634 81

And the same has been disposed of as follows:

Paid road exp's.....	\$794,343 46
" bank exp's.....	14,651 92
" int. on bonds.....	11,994 50
Dividends declared.....	600,000 00
App'd depot bldgs.....	120,000 00
Carried to reserve.....	185,644 93

Total.....\$1,726,634 81

The reserve fund is now \$702,720 15, but subject to the payment of \$28,000 annual rent of the line from Gordon to Eatonton.

The small sum mentioned in last report as due prior to December 1st, 1857, has been collected, except the sum of \$292 16, which is probably insolvent.

The balance uncollected of earnings for year ending

30th of Nov., 1858, as shown in last report, was.....	\$99,166 95
There has been collected of the same.....	99,187 98

Leaving balance due.....\$78 97

There has been collected from earnings of year ending 30th Nov., ultimo, the sum of.....\$1,546,466 21 leaving uncollected the sum of \$87,581 59.

The reserve fund of the Company, \$702,720 15, seems large, but it must be borne in mind that a part of the assets of the Company can not be disposed of, being of as permanent a character as the equipments of the road itself. The investment in steamships, \$284,791 36, and in negroes for road, \$31,903, make together \$316,094 36, which, deducted from \$702,720 15, would leave, of available reserve, \$386,625 79, an amount which should be increased out of future surplus earnings rather than diminished.

Shortly after the last semi-annual settlement, the stockholders in the New York and Savannah Steam Navigation Company, in which this Company held considerable stock, by a large majority, determined to sell the three side-wheel ships composing the line. Seeing that the loss of this line of steamships would be very injurious, if not disastrous, to this Company, the Board of Directors did not hesitate to make the necessary arrangements for its continuance. This Company agreed to take the ships at \$270,000, with the understanding that all stockholders should have the option of receiving in cash their share of \$270,000, or continue on as stockholders. The plan adopted was entirely satisfactory. Stockholders of 2,400 shares elected to retain their stock. Other stockholders elected to receive their share in cash, and transferred their stock to this Company. A few stockholders have not signified their determination. Thus this Company holds 4,420 shares of stock in the Steamship Company out of 6,930 shares, the total amount.

A new propeller has been added to the vessels of the Atlantic Screw Steamship Company, making three vessels in that line. An Independent ship, the Star of the South, a third of which is owned by this Company, runs with the other two lines. And thus the important step has been taken of establishing a regular tri-weekly line of steamships between New York and Savannah.

An examination of the tables appended to the Superintendent's report, showing the vast

increase in up-freight, (merchandise) during the past season will satisfy the stockholders of the propriety of this action of the President and Directors, and justify entirely the expenditure of the large sum paid by the Company in this respect. It is believed that the investment will yield a fair profit, beginning the first day of January next. The incidental benefit to the Company, however, would alone justify the policy which has been adopted. It may be politic and necessary to increase both the investment in steamships and negroes for road, from time to time, in order that more business may be invited and economically transacted.

The President, with the approbation of the Board, made application to the Legislature for the passage of a law authorizing this Company to consolidate the stocks of the Milledgeville and Gordon and Eatonton Branch Roads with the stock of this Company, on terms to be agreed on, and further to increase the capital stock of this Company to \$5,000,000. The present capital of \$4,000,000 has been kept at that sum, it being the limit allowed by charter, whilst a large sum beyond \$4,000,000 has heretofore been taken from the earnings of the Company and expended on the road and its equipment. Over a million of dollars of money earned has been thus appropriated, and common justice requires that some equivalent should now be given to the stockholders.

The act has been passed, and a copy of it will be submitted to the stockholders. In the opinion of the President and Directors, the stockholders can realize dividends amounting to 10 per cent per annum on a capital of \$5,000,000. The capital of the roads proposed to be consolidated will require the issue of new stock to the extent of about \$800,000. If \$500,000 of stock be now given to the stockholders there will be left about \$200,000 for future emergencies. Twelve and a half per centum on the stock of the Company amounts to \$500,000.

The Board has passed, this day, the following resolution, to wit:

Resolved, That 5,000 shares of new stock be issued, being twelve and a half per centum on the present capital, and disposed of and distributed to and among the persons who are now stockholders, rateably; and that the new scrip and certificates for fractional parts of a share, be prepared by the Cashier by the first day of March next for delivery. The resolution subject to the approval of the stockholders at the annual convention, to be held on the 20th inst., if there shall be a quorum to transact business.

Looking to the large amount to be expended for increase of rolling stock, and for additional or double track, the Board has deemed it prudent to retain \$200,000 of the new stock authorized by the late act to be issued and disposed of.

The 5,000 shares of new stock above referred to, are, in the contemplation of the Board, to rank with the present stock, with future dividends.

Respectfully submitted, R. R. CUYLER,
Savannah, Dec. 15th, 1859. President.

From the accompanying report of George W. Adams, Esq., General Superintendent, the subjoined extracts are copied, showing at a glance a very satisfactory state of the operating department of the road:

EARNINGS OF THE ROAD FOR THE YEAR.

Up-freight (westward).....	\$58,116 55
Down-freight (eastward).....	677,401 50
Total from freight.....	\$1,265,518 05
Through passengers.....	\$ 97,704 44
Way passengers.....	179,444 87
Up and down passengers Gordon, M. & E. Railroad.....	20,438 17
Total from passengers.....	\$297,587 48
United States Mails.....	32,625 01
Passenger train and express freight.....	38,217 30
Total earnings.....	\$1,633,947 84

Ordinary exp's for the year have been.....\$707,216 63
Extraordinary expenses have been 87,126 83
Total expenditures.....\$794,343 46

Leaving actual net earnings.....\$839,604 38

The gross earnings for the year have been \$1,633,947 84, being an increase over the previous year of \$280,225 84, or nearly 21 per cent. The total expenditures for the same time have been \$764,343 46, being an increase of \$196,237 238, notwithstanding this large increase in expenditures over the previous year the net income is \$839,604 38, or an excess over the previous year of \$83,989 46.

390,188 bales of cotton have passed over the road in the year just closed, being an increase of 12,995 bales through from Macon and above, and 28,588 bales from way stations and Augusta. In other articles of down produce, such as corn, wheat, flour, bacon, hides, &c., there has been a considerable decrease. The decrease in wheat and flour is readily accounted for by the short crop in upper Georgia and Tennessee. The increase in way cotton, must, I think, in a great measure be attributed to the free use of fertilizers by the planters in the counties adjacent to this road, demonstrating that the liberal policy of carrying fertilizers at a nominal price, adopted by the Board one year ago, has been of essential advantage to the business of the road and the planters of the State.

There has passed over the road of the various fertilizers within the year, 3,864,850 lbs, mostly for use in our own State, but a portion for Alabama and Tennessee.

The large up-business of the past year was done with a promptness that has given general satisfaction to our customers.

The great press of cotton for the past month, (we having transported 96,266 bales) being 20,000 more than ever passed over the road in any one month before, taxed the motive-power and cars of this and all connecting roads to their utmost limit, and demonstrated the necessity for more engines and cars, not only on this, but the roads connecting with us, before another crop comes to market.

Our trains have run with great regularity and without any serious accidents by which passengers or employees were injured, or the Company's property destroyed.

The only injury to life or limb that occurred during the past year was the falling of a fireman from his engine, by which he lost his life, and the falling of a passenger between the cars, in passing from car to car in the night, whilst the train was in motion, by which he unfortunately had his foot cut off.

IRON RAILS.

Within the year there was purchased from the Lackawanna Iron Co., of American rails, 45 pounds to the yard, 638½ tons, costing laid down in our yard.....\$35,489 75
Of old rails there has been re-rolled, at the Atlanta Rolling Mills, of 45 lb. rails, 1,451 tons, at a cost, laid down at our yard at Macon of.... 46,338 94
Purchased from Phoenix Works, 7 000 chairs, continuous lip, 9½ inches long, for laying the above rails, costing..... 4,401 04
Total cost of rails and chairs.....\$86,229 73
Which has been charged to repairs of road. During same time there was shipped to Philadelphia 233 tons of old rails which sold for... \$6,580 67

This amount for old rails should have gone to credit of repairs of road, but motive-power and cars got the credit of it in the purchase of wheels.

The rails purchased and re-rolled will lay about 29½ miles, of which 22½ miles are already laid, and the remainder, 7 miles, are being put down. There have been received for use of line, Savannah to Macon, during the year, 80,093 ties, 883,709 feet board measure bridge timber, 2,024,031 feet do. stringers, 6,264 feet do. switch stringers, and 1,071,972 do. other lumber for planking cotton yard, Savannah

and other stations and for buildings; making a total of 3,985,976.

The number of ties put in the road the past year, was equal to a renewal of 35 miles; rather more will be required for this year.

The amount of stringers used is equal to a renewal of 41 miles; an equal or greater number must be put in this year.

There have been received and used on line from Gordon to Eatonton, 5,048 ties; lumber, board measure, ribbon 87,943 feet; bridge timber 6,336 feet; stringers 196,125 feet; other purposes 24,376 feet; in all 314,780 feet.

Of the light bridge rail, (weighing about 36 lbs. per yard,) taken up on main line, there has been laid on the Eatonton branch about 8½ miles at the Gordon end. As the new rails are laid on the main line, we propose using the best of the old rails taken up to complete the relaying of the road to Milledgeville, about 8½ miles; by so doing we shall have a good road to that point, and save the constant expense of renewing the ribbon.

There are on hand of old rails, main line, about 570 tons, flange rails branch, 310 tons, making total of 880 tons; most of which are unfit for use.

We shall require to have re-rolled this year 2,100 tons, enough to relay 30 miles. The cost of re-rolling and freight will be, with chairs, \$70,000. The rails now in the track are in better condition than at date of last report. Should not less than 2,100 tons of 45 lb rails be provided, and laid annually, I believe the road can be kept in good order, and worked economically, whilst with a less amount, I admit the track could be kept passable; my experience, however, teaches me that it would be a much greater wear and tear of rolling stock and track; and much greater risk of accidents and irregularities, and as a consequence of increased expense.

[From Hunts' Merchants' Magazine]

CANALS OF THE UNITED STATES.

A brief view of the Canals, their past history and present state—like causes produce like effects—certainty and celerity, with saving of time, and this, too, every day in the year, are the watch-words of commerce, produced by railways to the decadence of canals.

These plain axioms have produced the revolution taking place in the mode of transportation, both in Europe and the United States. It is a fact, now well established, that all tonnage of value, cattle, and perishable articles are leaving the canals for the railways, more and more each successive year, as the consumer and producer will pay for time, certainty, and celerity, while banks patronize railways to get short drafts.

We took this ground, twenty years ago, to endeavor thereby "to do the State some service," as in part stated in the November number of the *Merchants' Magazine*, (page 547). We will further enlarge on this subject, to correct, if possible, at another time, the views entertained in 1840 by the canal advocates in this State and in Pennsylvania, who proclaimed as their creed, "that canals are always growing better, while railways are growing worse," a doctrine that, unfortunately for the rising generation of tax payers, the State of New York has acted on, at one period and now, to the serious detriment of her credit, with the certain prospect of increased taxation to sustain her credit and pay her State indebtedness.

The present canal system, and the political management of our canals by conventions held in Rochester and Utica, and by Clinton Leagues in New York, to make political capital, under the absurd plea of "saving them," and their "more speedy enlargement," and in

propounding questions to members nominated to the Legislature in all parts of the State, has become an evil that requires correction.

Experiencia docet is a good motto of the Latins. Experience, however, does not teach the statesmen of New York. They shut their eyes to the history of canals in the States around them. We have been infatuated with our success with the Erie Canal, a work unique in its character, uniting, with the Oswego Canal, as they do, inland seas, and the vast and fertile coasts on their borders, with the city of New York.

To recount, as briefly as possible, the fate of canals in the several States, is by no means a pleasant task. It may, however, be a useful lesson to our next Legislature to ponder on, and may be useful in illustration of our text—"like causes produce like effects"—while experience should teach us that all the wisdom of the State is not concentrated in a self-constituted league of forwarders and seedy politicians, who would use the canal mania, with which the State of New York has been inoculated, to still ride this political hobby; and, let us add, to such an extent, that it is high time the people should pause, and take soundings for a new departure. We say this, in view of the reckless, the heedless expenditures on the log rolling lateral canals, under the plea of repairs, "to be made on the plan of the enlarged canal," when the whole of these lateral canals have been superseded by railways, with the exception of the Oswego Canal, and this important work would not be an exception, if the Oswego and Syracuse Railroad was finished; that is to say, connected with the mills and harbor of Lake Ontario, or, what would be better, (our favorite hobby,) a direct railway from Oswego to Troy, to intersect at that point the Hudson River Railroad and the Hoosic Tunnel route to Boston, and thus connect the West with the wharves of New York, and with Boston, on a line, and the only one, that can contend successfully with the Great Western and the Grand Trunk railways of Canada, leading through manufacturing New England to Boston and Portland, as well as Quebec, destined, in looking to the future, to relieve the Erie and Oswego canals of all plethora of business.

But to refer to the history of canals, and their fate, in sagacious New England. The Essex Canal, in Massachusetts, has been superseded by the Boston and Lowell Railroad; the Blackstone Canal by the Providence and Worcester Railroad by its side. The tow-paths of these canals are serving for railways, while the water in them is being diverted and used to supply mills and spinning-jennies. The Farmington Canal—to repeat an old story—to open which, and for the important occasion, Governor Clinton and the magistrates of New York were invited to attend, and a great deal said of its importance and of its future success, has gone into oblivion. A railway is constructed on and near its tow-path, and is vivifying the manufactures and agricultures of Connecticut by producing celerity and certainty.

The six New England States, while they have abandoned the construction of canals as an obsolete idea, have completed, up to 1st January, 1858, (see the *Merchants' Magazine*, for March, 1858, p. 385,) 3,884 miles of railways, at a cost of \$146,805,163; and as a whole system and investment, (although there are many competing and premature lines running north and south,) they have paid about 6 per cent. per annum since their commencement. The State of Massachusetts, in her sagacious enterprise, has the honor of having completed the first railway in the United States—the Quincy, on which to trans-

port her granite to market. Then Maryland followed with her Baltimore and Ohio Railroad, to pass the Alleghany ridge, 2,700 feet high, and with very exceptionable grades; yet over 2,000,000 barrels of flour were transported in 1857-8 over this road to Baltimore, principally from the valley of the Ohio, formerly controlled by the New York Canals. Of this 2,000,000 barrels of flour, more than one-third was shipped coastwise to Philadelphia, New York, and the New England States. "The value in grain transported over this road in 1858 was \$5,300,000; provisions, \$6,000,000; live stock, \$4,174,000; dry goods, \$30,000,000. The hog receipts in Baltimore in 1858 was 183,161." "Of 43,031 beef cattle slaughtered in Baltimore, 14,400 came over the Baltimore and Ohio Railroad, and 47,881 sheep."

The engineering wisdom of the State of New York next came into the field, and projected and built the Albany and Schenectady Railroad with two inclined planes, that have since been superceded, and laid a track down State street, on the call of the citizens of Albany, which of course had to be abandoned, also the dark, pick-pocket depot of 30 feet by 100, in which the great trade and travel to and from the West was to be concentrated.

In New Jersey, the Morris Canal, 101 miles long, to Easton, Pennsylvania, constructed at a cost of \$4,300,000, has sunk its capital to reach the coal mines, and we believe only lives in the memory of the stock dealers of Wall street. It has never earned a dividend, and is now superseded by railways parallel to it, contending for the same trade. Such is also the case with the Delaware and Raritan Canal, 43 miles long, 7 feet deep by 70 feet wide, costing \$3,000,000. This canal has two or three locks, starting from Trenton, on the Delaware, and terminating at New Brunswick. It commenced with steam and horse power, and is now operated mainly by mule-power. Comparatively, with its capacity, it does a very limited business. At its commencement, it did not earn one per cent. net on its cost. Family and political influence, it is said, was brought to bear in the New Jersey Legislature on the proprietors of the Camden and Amboy Railroad, costing about the same sum as the Delaware and Raritan Canal, and this latter bad investment was forced on the railroad, with special privileges granted to make it a monopoly for transportation through New Jersey. The railway was to have the privilege (a doubtful constitutional one) to charge, we believe, about one dollar per head for each foreign passenger passing through the State for the benefit of the treasury of New Jersey! The railway has regularly, for a number of years, earned from 15 to 16 per cent. and divides the same with the canal in 8 per cent. dividends on both canal and railway.

The history of the canals, and other State improvements of Pennsylvania connected with them, in the log-rolling principle on which the canals were constructed, presents a costly and painful exhibition of the mania caught by that State from the State of New York, after our first success with the Erie Canal. Pennsylvania, after having been forced to suspension in paying the interest on her State indebtedness, (exceeding \$35,000,000—we believe near \$40,000,000,) and finding, after a fair trial, (as we shall find in New York,) that the State, confessedly, "was incompetent to manage her public works with economy," that the canals were fair game for each political party to plunder as they came into power, came to the sound conclusion that it was best to sell her public works, particularly the main stem from Philadelphia to Pittsburg, if she could get \$7,

000,000, at which they were limited. They were in the market two years before the Central Railway of Pennsylvania was induced by the State to purchase them. The result has been, as the late Governor tells us, that the canal is better managed by private enterprise than it was before under appointments made for political services, liable to constant change by a popular vote, perhaps just at the moment the incumbent had just learned his duties. The Schuylkill Canal, under private management, has been enlarged to 6 feet by 60, (the best possible size,) 108 miles long, and has a descending lockage all the way from the coal fields, and has a constant and steady business in the transportation of coal. Before the Philadelphia and Reading Railroad was projected and completed, the stock of this canal company was up to \$160 for \$50 paid per share, giving at that time 20 per cent dividends. In the contest with the railway for supremacy, the canal had to intermit its dividends four years, contending for the same trade. The railway, finally, we believe, dictated terms, or rates of transportation, to the canal. They have now, we believe, mutually agreed on a rate to remunerate them for transportation, which, for the railway, for 1857, was \$1 41, and in 1858, \$1 21, (the average of the seasons, \$1 31,) per ton per mile. We have not the official report for 1859. The railway carried also 577,330 passengers, or equal to 211,568 through, during 1857-8, with 4,069,956 tons, (of 2,000 lbs.,) or above two millions of tons per annum. The canal, during the same period, did not transport half that quantity, and during its seven to eight months of navigation is not competent to transport, half the quantity the railway has proved itself competent to transport, say four millions of tons per annum. The canal on an average, is closed one year in three, and in New York a longer period.

The Delaware and Hudson Canal, supplied by a railway from the mines in Pennsylvania, has sustained itself in name as a canal, and has paid regular and good dividends to its stockholders. This arises, however, from its owners mining and transporting their own coal to the New York market, and then dividing the profits. This is also the principle on which the Lehigh Canal is managed.

The five Middle States had open and in operation to January 1, 1858, 6,894 miles of railroad, costing \$309,376,488. We have not at hand the average net earning on this capital.

From the experience of Pennsylvania with her canals, owned and managed by the State—a complete failure—we pass to the State of Delaware. She has a large or "ship canal," to pass coasters between the Delaware and Chesapeake, excavated through a deep cut, at a great expense. The last we heard of this canal, after its completion, was that it passed into the hands of a receiver, to pay Mr. J. Randall, the engineer, and the contractors, for building it. It has disappointed, we believe, its projectors, in passing the coasting trade from Philadelphia to this channel to Baltimore, the railway between these place transporting the valuable tonnage.

The Governor of Maryland, in his message two years ago, informed the Legislature that the State had once been offered one million of dollars for what had cost her above eight millions, invested mainly in the Chesapeake and Ohio canal, and if the State could again get a like sum offered, it would be best to take it. Further, that the interest on the bonds granted to the Baltimore and Ohio and other

railroads had been punctually paid, and was no burden on the State treasury.

Virginia called to her assistance a distinguished French engineer to scale her Alleghany Ridge. She has not been successful with her "James River Improvement," nor in her expenditures on the Chesapeake and Ohio Canal, although aided largely by the General Government with funds invested in this work—lost entirely—which in part justifies her in not aiding, or mixing herself with or in, the internal improvements of the several States. Breakwaters, the improvement of harbors, and light-houses on our sea and lake coasts are legitimate objects of expenditure from the revenue derived from imposts, not the internal improvement of States. An appropriation of funds to construct a Northern and Southern Pacific Railway to the port of San Francisco, and to the Straits of Fuca and the mouth of the Columbia River, derived from the sale of the public domain, or this source of revenue to be used to pay the interest on the cost, and finally the cost itself, of these two works, calling their cost to be at from one to two hundred millions, and to be managed by private enterprise and directors—a part, say one third to one-half, to be appointed by Congress, and also to be under the supervision of the President and his cabinet—we think a legitimate enterprise for the General Government, under the peculiar circumstances of the case. We are opposed, from past experience, to the General or State governments constructing or managing public works of internal improvements and intercourse between the States.

From Virginia we pass to North Carolina. Between these States we have the Dismal Swamp Canal, constructed originally with the desire and hope of avoiding Cape Hatteras to the coasting trade of the Chesapeake and the Delaware. In the time of war, if we had no railways, it would be an admirable internal improvement. It has not paid 2 per cent per annum on its cost since its completion.

The other Southern States have but few and short canals. South Carolina has eight river improvements, numbering 52 miles; Georgia two, of 28 miles; Alabama two, of 51 miles; Louisiana, 28 miles; Kentucky five river improvements, of 486 miles, of which we have no account.

The five Southern States have completed and opened, up to January 1, 1858, 4,058 miles of railway, costing \$94,885,632. The seven South-western States, to the same period, have 2,438 miles opened and in operation, at a cost of \$67,128,946; the whole of which is a paying investment, managed by private enterprise, and of incalculable value to bind the interests of these States together, and to connect them with the Western and Northern States. The \$900,000,000 invested in 26,000 miles of railway, up to January 1, 1858, is next in amount to the investment in agriculture. It is of the first importance to bind the States and their interest, together in iron bands; to distribute intelligence and literature by the mails; and railways make the country invulnerable to foreign attacks.

We now pass to the State of Illinois, where the first emigrants, mainly from the State of New York in the first instance, and settled in and south of Chicago, projected and completed the Michigan and Illinois Ship Canal. Although this work started and turned public attention to Chicago as a distributing point to the West, it has been nearly superceded by the numerous railways constructed nearly parallel to it, some thirteen of which have their termini at Chicago, making it the greatest re-

ceiving and distributing point of grain in the world, numbering twenty-one millions of bushels.

Statistical reports present the fact that the State of Illinois has doubled her population every five years for the last fifteen years. If the whole amount expended in this State for railways was obliterated, the people and taxable property in it would still be benefited. It is true the new Western States have been constructing railways, for speculative purposes, and *in advance of population*, to sell lands on grants made to them by the General Government, that has brought the system into discredit as paying works. Eastern capitalists have been tempted by the high rates of interest with mortgages on farms situated on the line of these enterprises, particularly in Wisconsin, to invest their money. We trust, with a little more time, the borrower and the lender will secure the benefit of these investments, as the motto of railways over the world is "*upward and onward*."

The State of Indiana must, forsooth, follow the example of the great State of New York, to her cost and shame, by repudiation. She projected and completed the Wabash and Erie Canal, 469 miles in length, costing, we believe, about \$22,000,000—"the longest canal in the United States;" but was obliged to intermit paying the interest on her debt for its construction. At this stage, the unpaid contractors and bondholders took the canal off the hands of the State at half cost—at the time thought a great bargain. The sequel is—and the lesson should teach the State of New York, (the only one that thinks of canals, except as a bad speculation, and for the management of a State,)—that the purchasers of the canal have been before the Legislature of Indiana with petitions complaining of their unfortunate purchase, and claim that, as the State had granted charters to railways parallel to this "magnificent canal," the construction of which had carried off the business of the canal, although the State engineers of Indiana, at the time of sale of the canal, had, like those of New York, stated to the public in their official reports, and in their hot zeal for canals—or in their ignorance—that railways could not, under any circumstances, compete with canals, they should be remunerated for their loss. One engineer in the State of New York palmed off his official opinion "that it would take six double track railways by the side of the Erie Canal to do its through business," when he should have known that, at the time, the people were humbugged with this opinion, being about the time the nine millions of dollars was to be borrowed for the more "*speedy enlargement*"—a work, to the disgrace of the State or the engineering talents she has employed, has been twenty-four years in the course of prosecution, and as yet the Canal Board for the season of 1859 have ordered, by resolution, that "no boat be permitted to draw over five feet," yet with this depth of water the new and improved canal boat has carried 213 tons from Rochester, and about the same through the Oswego Canal. They have also touched bottom on the long level at Rome, during the summer, drawing only four and a half feet—*pro pudor*.

As our remarks on the history of canals in the United States, although as brief as possible, have extended beyond the space we had intended to confine ourselves, we will therefore merely say of Ohio, (a State that has been bit with the canal fever to the extent of 796 miles of canals,) that her Governor has told the last two Legislatures in his messages, that railways were yearly reducing the receipts on the State

canals—like in the State of New York—and the question must be met—whether, from past experience, it would be better for the State to sell out her public works, and let them be managed by private enterprise.

We will not now touch on the errors and the past experience of New York, in her log-rolling system of lateral, pauper canals. If time and health permits, we will give the readers of the *Merchants' Magazine* "our experience" on this subject, and their political management, for more than one-third of a century, and endeavor to show that it is high time to pause in our mad career of further spending money on our canals, beyond perfecting a uniform depth on all our canals to six feet of water, and to foster and protect railways and private enterprise, and not tax it. J. E. E.

RAILROAD ACCIDENTS IN 1859.—The number of railroad accidents in the United States during 1859, which were attended with injury to persons and loss of life, were 76; persons killed, 129; persons wounded, 411. This does not include accidents caused by carelessness of travelers themselves, of deaths or injuries resulting from the reckless conduct of persons crossing railway tracks where trains are running. The following table shows the number of persons killed and injured during the last seven years:

Year.	Accidents.	Killed.	Injured.
1853.....	138	234	495
1854.....	183	196	588
1855.....	142	116	539
1856.....	143	195	629
1857.....	126	130	530
1858.....	82	119	417
1859.....	79	129	411
Total.....	903	1,109	3,611

ANOTHER RAILROAD CONVENTION —THE FREE PASS SYSTEM.

The Managers of the various railroads centering at Chicago, held a convention the first of the present week, and like most railroad assemblages, passed several "Resolves," amounting to ten in number, and all upon the subject of free passes. They provide: 1st. That each company may issue annual or time passes to the President, Vice-President, Superintendent and Traveling Agent with such companies as it may have ticket or freight arrangements with; also, two tickets to be issued to the company, to be used for business purposes. 2d. That assistant superintendents, general ticket and freight agents of lines terminating in Chicago, may receive annual tickets, and general railroad agents located in Chicago, and traveling agents duly appointed, may receive quarterly tickets. 3d. Trip tickets may be given to editors of papers in Chicago, but editors of daily and weekly papers along the line are only to receive quarterly tickets, and that in payment for advertising. (What an immensely generous proposition! Permit a country editor to ride out his advertising bill!) No passes shall be given to weekly or monthly papers in Chicago, either as a gratuity or on account of advertising. (So they won't pay the Chicago weekly editors for advertising in passes!) 5th. No time passes or half-fare tickets are to be issued to clergymen. 6th. No passes are to be issued to influence travel or freight against any competing road represented. 7th. No person from other roads is to be passed upon letters or pass-tickets. 8th. Trip passes may be issued by each road over its own line, for purposes *purely local to itself*. (This resolution virtually does away with all the others, as it permits each company to be its own judge of what is "purely local to itself.") 9th. Half-

fare arrangements on passengers and freights, or excursion rates, may be made to State and National Fairs. 10th. No return passes are to be issued to drovers hunting up stock for shipment.

The above is the sum and substance of the resolutions, and, take them altogether, they look as if the managers of the Chicago roads were desirous of being very stiff-backed, but had not quite the necessary nerve. Each one is afraid of the other, and consequently a large hole was left in the eighth resolution for a graceful exit when self-interest dictated. —*Cin. Eng.*

IMMENSE CANNON CAST AT PITTSBURG.

A thunderer of more than seventy thousand pounds weight—the largest iron cannon ever made, was cast yesterday at the Fort Pitt Foundry, by Messrs. Knap, Budd & Co., for the United States Government. The casting is fifty inches in diameter, and nineteen feet four inches long. Seventy-eight thousand pounds of iron were melted for it, in three reverberatory air furnaces, all of which was melted at the same time. The whole of this immense mass of metal was ready for casting in four and a half hours after the lighting of the fires in the furnaces. The furnaces were tapped in succession, and the iron run in separate channels into a common reservoir, from which it passed into the mould, which was filled in twenty-one minutes after the first tap. The mould is a ponderous structure, and is placed vertically in a pit. The iron flask which supports it weighs thirty-one thousand pounds, and, together with the earthen mould, weighs fifty-four thousand pounds. When filled with the iron, the total weight is one hundred and twenty-eight thousand pounds. This is believed to be the heaviest casting ever made in a single piece in the United States, from iron melted in reverberatory furnaces. The capacity of the mould is seventy-two thousand pounds.

The gun now cast is named the "Floyd," after the Secretary of War, whose zeal for the improvement in artillery has prompted this laudable experiment in gunnery. The model of the gun was designed by Capt. T. J. Rodman, of the United States Ordnance Department, and was made under his supervision, on the plan invented by him for casting guns hollow, and cooling them by circulating a stream of water through the interior of the core. The cold water enters at the top, passes down through a pipe in the centre of the core, is discharged at the bottom of the hollow core, and while passing up through it becomes heated and is discharged at the top. It circulates in a constant stream at the rate of about forty gallons per minute, and its temperature is increased from thirty-six degrees at its entrance to sixty degrees at its discharge, and the stream will be continued until the casting becomes cold.

A NEW COMPOUND RAIL.—Mr. Joseph L. Hallet, and intelligent employee of the Western Railroad, has invented a new compound rail for railway tracks that has impressed quite favorably such railroad men as have seen it, and is worthy of an experimental trial. The chair is continuous with the rail, and takes up all the lower portions of the rail as represented in the common or T variety. The rail itself in this case is light and fits tightly into the continuous chair, and is made as good as solid by bolts. The entire weight is but a trifle more than a T rail.

PROPOSED RAILROADS IN MEXICO.

The negotiation of the Treaty with the Liberal government of Mexico has revived the hopes and enterprises of various parties who have heretofore initiated measure for the construction of railroads across Mexican territory, to effect a more speedy and reliable communication with the Pacific. The Tehuantepec was a favorite one with the Polk and succeeding administration, for, while it would secure the important objects contemplated, it was regarded as a basis of accommodation to the interests of all sections of our country. The President, in his instructions to Mr. McLane, was particular in providing for the protection of the rights and immunities of all citizens of the United States, without regard to any individual scheme or enterprises whatever in connection with the transit privileges thus far secured; but, at the same time the Juarez government, wishing to be faithful to its obligations, will, doubtless, respect its existing contract with the Louisiana Co., the operations of which, on the Isthmus were suspended several months, owing to pecuniary embarrassments. Both governments guarantee the neutrality of the transit routes, and will protect them, if necessary, by military force; but this protection can not be claimed or expected unless the railroad companies transport troops, munitions of war, and military supplies of either government at half the rates charged to other parties or private individuals. This appears to be the condition of the protection as stipulated in the treaty.

There can not be a doubt that our government will take, if it has not already taken, measures, to encourage the re-opening of the route, and that Mr. McLane, before he left the United States for Mexico, understood fully the views of the administration on this subject. Gentlemen interested in the Tehuantepec route, confidently say that it will be re-opened under more favorable auspices than heretofore. The company for that purpose is to be reorganized, and a more efficient management secured. It is estimated that \$3,000,000 will be sufficient to construct the road, although it has been proposed to make the capital \$20,000,000. Mr. La Sere, connected with the Louisiana Company, stands in high favor with the Liberal government of Mexico. He was a true and firm friend in other days to Juarez and Ocampo, and more recently when the Reactionists threatened Vera Cruz, he placed a steamer belonging to his company at the disposal of the Liberal government, which it used with advantage in the neighborhood of Vera Cruz. This gentleman, in connection with Mr. Benjamin, will, it is said in quarters usually well informed on such subjects, visit Vera Cruz on business connected with this railroad, in order to effect such modifications of their contract as will better further their enterprise; and in this errand, it is reliably asserted, they will be aided by the co-operation of Mr. McLane. These movements are in part, however, based on the supposition that the treaty will be duly ratified.

ANOTHER DEAD SEA.—A writer in the *Union (Cal.) Democrat*, gives a very interesting description of Mono Lake, which has recently engrossed public attention, from the fact of the discovery of deposits of gold in the neighborhood. He says:

Mono Lake is more literally a "dead sea" than the sea of Sodom. According to Dr. Clarke, that "sea swarms with fishes, and shells abound on its shores." Mono Lake has neither. The extreme length and breadth of the Dead Sea, according to Meriti, are 75 by 16 miles, giving a superficial area of 600 square miles; whereas, Mono Lake contains 675 square miles. The river Jordan and Arnon, and the brook Kedron, besides many rivulets, empty into the

Dead Sea. Into Mono Lake, McLane's river falls from the North and Crosby's river from the South, and three large brooks or creeks fall into it from the West, besides numerous rivulets and springs all around its borders. But this lake not only responds to the Greek epithet *monos*, as being "alone solitary, deserted, forsaken," but it also answers to the same adjective as explained in the Spanish as being "pretty, nice, neat."

The lake takes as many shapes as the points differ from which you view it. From the west side, about ten miles from its northern limit, it appears like a beautiful crescent, its horns curving delicately around you on the right and left. From the north it appears to be nearly circular, like the full moon, the islands in the waters strikingly representing the clouded spots on that planet. From the east it appears to have no particular shape but it stretches off irregularly among the mountains.

There is little or no echo around this lake, and indeed it is difficult to understand a person talking at a little distance. A dreamy, spell-like spirit seems to pervade the atmosphere. The smooth, glassy surface of the waters; the upheaved disrupted volcanic mountains surrounding the lake, looking down, as it were, into this abyss of their ejection; the illusion of vision, and the whitened shores, thickly columned in many places with the vesicular lava which looks like monuments erected to the "mighty dead;" all conspire to impress the mind with the idea of fictitious scene, portrayed by the pencil of an omnipotent hand.

ILLINOIS SOUTHERN RAILROAD.

The following are the details of a contract entered into by the President and Directors of this road, and Messrs. John & Daniel Stanton, for its construction between Vincennes and Mound City:

They agree to construct the road and equip it in a manner to accommodate a gross business of one million of dollars per annum, for the sum of thirty thousand dollars per mile. One-third of the road, viz: Fifty miles is to be completed within eighteen months from the date of the contract; another third within thirty months, and the balance within three years.

The labor already performed on the road is to be covered by this contract, and the Messrs. S. are to account to the company for all monies by them in this behalf expended. The Messrs. S. are also to relieve the company of specified indebtedness, in the aggregate to thirty or forty thousand dollars; and to build all the necessary switches, side-tracks, and all appendages needed at the depot, crossings and stations along the line, depot buildings alone excepted.

The interest on the bonds issued by the company, in pursuance of this contract, is to be paid by the Messrs. S. up to the time of the completion of the road, as also all taxes that may be legally assessed upon the company's property.

The company on their part agree to pay the said contractors the said thirty thousand dollars per mile, as follows:—In county, coporation and land bonds, at par, nine hundred thousand dollars; and all other subscriptions that can be procured. The balance about three million and six hundred thousand dollars in company bonds, drawing eight per cent. interest, payable in twenty years, and secured by mortgage on the road-bed. As a further compensation, the said contractors are to have the use of the road and receive the profit thereof, if any, for three years from the date of the contract.

The legal and equitable title of the road and its appurtenances are to remain in the com-

pany, and without written consent, it can not be impaired or encumbered. The company, however, agree to allow the contractors to exercise and enjoy so much of their legal franchises for the construction of the road, and for its operation for the time specified, as may be necessary; and to furnish them free of charge, the right of way.—*Western R. R. Gazette.*

FALL OF THE TROY RAILROAD DEPOT.—The Troy Arena of Friday morning gives the following account of this remarkable accident. The particulars are of great interest to architects and builders, showing, as they do, the action of intense frost upon iron girders and braces in this climate:

GREAT CRASH.

"At precisely thirty-five minutes after three o'clock, this morning, the north half of the roof of the Troy Union Railroad Depot fell suddenly with a crash and jar like that of an earthquake.

The building is an immense structure, built of brick. It was completed in 1853. It is 400 feet long, inside, from wall to wall. The roof has a span of 150 feet. The spring of the arch of the roof is 30 feet.

The distance from the top of the arch of the roof to the floor of the building is 65 feet.

The roof is one of How's Patent Truss Roofs. In the construction of the roof two men were killed. The roof is an iron one. It was supported by twenty trusses, nine of which are broken. The trusses were strengthened and supported by lateral iron girders, sweeping clear across the lower part of the roof, forming a continuous stretch of iron of over 180 feet.

These girders, contracting under the intense cold, and weakened by the mass of snow on the roof, must have snapped, leaving no support for the roof. Last winter these lateral girders, when the weather was cold, had to be loosened up, by means of the screw nuts at the ends.

This railroad depot is one of the largest in the world, there being none larger on this continent, and being only exceeded in size by one in Russia. The Rochester and Buffalo depots are built upon a similar plan.

The entire north wall of the end of the depot is level with the ground; the great iron pillars, the immense number of brick, and the materials of the roof lying in a confused mass. The whole of the north part of the roof has fallen in completely up to the central tower.

The weather was intensely cold at the time, the thermometer in the early part of the night being at 10 deg. below zero. There was a fall of snow last night—about 6 inches—and it was snowing at the time of the accident.

The damage must be to the extent of from \$30,000 to \$50,000.

SOUTHERN PACIFIC RAILROAD.—The Marshall (Texas) *Republican* has the following words of good cheer:

Our advices from Austin are of a cheering character. So far from having to apprehend any adverse State act, the company will be able to obtain all the legislation desired by its friends. The road completed is in active operation, and doing a good business. We venture to predict that by the 1st of February fifty miles will be under contract, with an ample force upon the work to construct it speedily. The conditional sale of \$1,000,000 of the stock, and the order to close the books, is a significant fact in the recent history of the company, promising the most flattering results.

RAILROAD TO FORT SMITH.

The company of the Fort Smith branch of the Cairo and Fulton Railroad, through their directory, propose to consolidate with that of the Memphis and Little Rock Railroad, so as to make a continuous road from Memphis to Fort Smith. The last Legislature provided that the Fort Smith and Memphis Companies might consolidate under the title of the Central Pacific Railroad Company; and there is a little doubt of the fact that the proposed consolidation will be of benefit to both of the companies, and to the country. The terms of consolidation, proposed by the directors of the Fort Smith branch, are, that the company shall have the \$600,000 acres of land, and use them as a basis of credit, to raise money with which to complete the railroad from Memphis to Little Rock, with the condition understood, that the road, when finished to Little Rock, and all of its means shall be pledged to raise the means of completing the road from Little Rock to Fort Smith. The valley of the Arkansas river, both in and out side of the State, and the country lying west, need an outlet by railroad, and a connection with the system of railroads terminating at Memphis, which can be made only by connecting with the Memphis road at this place.—*Little Rock (Ark.) State Gazette.*

SOUTHERN RAILROADS.—The Railroad Companies of South Carolina and Georgia pay better profits than those at the North. The Central Railroad Company of Georgia, connecting the cities of Macon and Savannah, has just published its Report. Its road is 190 miles long; its capital is \$4,000,900. Its gross earnings this year are \$1,726,634, and net earnings \$905,644, or nearly 25 per cent. After dividing in June and December 15 per cent. in cash, and appropriating \$120,000 to depot buildings, \$185,644 are added to the surplus fund, which stands at \$702,721. Based upon this, the Company makes a further dividend of \$500,000, or 12½ per cent. on stock. There is probably no parallel to the success of this Railroad Company, taking into view the large amount invested from its earnings, over and above its capital, in the extension and improvement of its property. In addition to its own line, it has contributed largely to make connections with Alabama and Tennessee.

The Macon and Western Company, connecting Macon and Atlanta, has also just made its Report. Its road is 100 miles long, and its gross earnings have been \$390,957, and expenses \$165,465, leaving for net profits \$225,492 on a capital of \$1,438,800. In the last twelve years this Company has divided \$1,514,798 besides a surplus of \$159,895 on hand. Both these Railroads have little or no debt, either funded or floating, and have replaced all light rails with heavy iron; and their tracks, equipment, and management will compare favorably with any Northern roads.

ANNUAL ELECTION FOR OFFICERS OF THE CLEVELAND, COLUMBUS AND CINCINNATI RAILROAD.—CLEVELAND, January, 11th.—The old Board of Directors was re-elected to-day, the only change being Joseph Perkins, of Cleveland, in place of Alford Kelly, deceased.

At a subsequent meeting of the Board, L. M. Hubby, was re-elected President, and E. S. Flint, Superintendent; all other officers same as last year. There was no opposition to the re-election of Mr. Hubby.

THE LAKE SHORE DIFFICULTY.—Great complaint has been made by the Erie Railroad Company, among others, at the imposition of an extraordinary tax or toll by the Erie and Northeast Railroad, upon all tonnage passing over it. The Erie Dispatch says that this tax was imposed to reimburse the road for moneys spent in maintaining the line during the Erie war, some two or three months since. The Erie road gave notice to its customers and to its Western connections that it would protect the bills of lading of all property consigned to it against this tax, and the road paid the Erie and Northeast Road its toll, but under protest. Mr. Dean Richmond of the New York Central is charged at being at the bottom of this matter, which is producing a great deal of irritation, and may tend to hasten the construction of another route from Erie, east.—*American Railroad Journal.*

MONETARY AND COMMERCIAL.

The Commercial World has now fairly passed the great settlement day of the year—accounts have been squared, balances struck, payments made, and notes given. So far as we have heard, the yearly settlements have been made with great promptness, and, as compared with other seasons, show very favorably for the West. The aggregate amount of indebtedness to the great Eastern Markets is much less than usual, and consequently requires less effort to meet. Collections from the country have been moderately good. The supply of currency still continues inconveniently limited, although somewhat better than during the holidays, and is readily absorbed by the continued demand for discounts and the more active movements of the assorting houses. Rates are without change, regular houses charging their customers 10@12, if they do any thing at all; outside rates range from 18 to 24, and many persons with good paper have really considered themselves lucky to be able to get it even at the latter rate.

Eastern Exchange is scarce and very firm at quotations. Buying rates on New York 40@45; selling 50 prem. At St. Louis on N. Y. is 1½@2 prem. for Banker's checks, and at Chicago 2 per cent. prem. We quote:

	BUYING.	SELLING.
New York Sight.....	40@45 prem.	1@1½ prem.
Boston.....	37 prem.	1@1½ prem.
Philadelphia.....	40 prem.	1@1½ prem.
Baltimore.....	37 prem.	1@1½ prem.
New Orleans.....	1 prem.	1½ prem.
American Gold.....	30@35	1 prem.

Illinois, Wisconsin, and Iowa currency is 2 per cent. dis., and Missouri 1½.

FINANCIAL CONDITION OF THE WEST.—With the commencement of the business of the New Year, a brief reference to leading facts connected with the financial and commercial condition of the West, will not be out of place. First, then, as to our financial condition. As stated in our last issue, there have been but few failures in this city since January, 1859, and in none of these have Western banks been interested to any great extent. In the item of suspended paper, therefore, our banking houses have no increase to report, but on the contrary, this account was somewhat reduced during the year, for paper that was practically in suspense in January, 1859, has, to a large extent been taken up since that time. These remarks apply to banks of issue in Ohio, Kentucky, and Indiana, as well as to our private bankers. In this respect those who are engaged in the department of finance are able to make a favorable exhibit. In another item the banks of issue make a strong showing. The circulation of Kentucky, Ohio and Indiana Banks, is less by \$4,000,000 than at the corresponding date last year, the aggregate being now about \$22,000,000, against \$26,900,000 on the 1st January, 1859. This is divided as follows:

Kentucky.....	\$11,000,000
Ohio.....	7,000,000
Indiana.....	4,000,000

Total.....\$22,000,000

Kentucky shows an aggregate contraction of \$3,000,000, and Ohio \$1,000,000. Indiana is fully up to last year, but her capital in the meantime has been considerably increased. The volume of the circulating medium in this section has also been materially diminished, by the purifying process through which our currency has passed. Paper that circulated largely a year ago, was thrown out during the Summer and Fall. This led to the withdrawal from this field, of at least \$4,000,000. According to these estimates, the paper currency in circulation in Ohio, Indiana and Kentucky at this time, is \$8,000,000 less than on the first of January, 1859; or \$22,000,000 against \$30,000,000—a contraction of about twenty-three per cent. Contrast this

state of things with that which prevails in the North-west. The circulation of the banks in the three principal States is as follows, in round numbers:

Missouri.....	\$ 8,000,000
Illinois.....	10,000,000
Wisconsin.....	6,000,000

Total.....\$24,000,000

The expansion in those States is almost as great as the contraction in Ohio, Indiana, and Kentucky. What is the effect of this? It is seen in the price of Exchange on New York, at the Commercial centers, which compare as follows:

Cincinnati.....	1@1½ prem.
St. Louis.....	1@1½ "
Chicago.....	1½ "

These figures indicate the difference between contraction and expansion—between a healthy and an inflated currency, in its relation to and effect upon the Commercial interests of the country. While the condition of Ohio, Kentucky and Indiana banks, shows the people to have been reducing their debts, that of the Illinois, Wisconsin and Missouri institutions gives evidence of increased indebtedness.

As to our commercial interests, the first inquiries are: How much do we owe? And what are our means? We do not of course propose to undertake an estimate of the entire debt of the West, as that would be a useless undertaking; but the comparative condition of the country may be stated with a reasonable degree of accuracy. It has been seen that the bank note circulation of the three States of which Cincinnati is the great center, has been reduced twenty-three per cent. From this it may be safely inferred that the mercantile indebtedness of those States has been diminished 20 per cent. at least since the first of January, 1859—at that time it was much less than on the 1st of January, 1858. It may be said, therefore, that we have less to pay, by twenty per cent., than a year ago. The next inquiry, then, is as to the available resources of the country. How does this account stand? In answering, let us first compare the prices of Western produce in this market, on the first of January for three years:

	1858.	1859.	1860.
Corn, per bush.....	30	67	51
Oats.....	32	67	48
Rye.....	55	86	\$1 00
Wheat, prime red.....	70	\$1 05	1 21
Barley, prime.....	62	73	73
Flour, superfine.....	\$3 70	4 85	5 35
Clover seed, per bush.....	5 25	6 30	4 60
Candles, Star, per lb.....	17	20	20
Lard Oil, per gall.....	85	85	85
Linsed Oil, per gall.....	55	75	60
Hogs, per 100 lbs. net.....	4 77	6 75	6 35
Mess Pork.....	12 00	17 00	16 50
Barrell Lard.....	68	11	10
Bulk Sides.....	60½	07½	08
Bulk Shoulders.....	05	05½	06½
Potatoes, per bush.....	35	80	65

There are other articles that might be quoted, but the list is sufficient for the purpose intended. Produce it is seen is slightly higher in value, than a year ago, while prices are much higher than on the 1st January, 1858. We know there is such thing as inflation in the produce markets, and that this is dangerous as it is unhealthy. It is also possible that present prices may be the result, in part, of over-sanguine anticipations, but this, for reasons we can not stop to consider, is not the case now, to the extent, at most, that need cause alarm. Prices may rule lower during the year, but there can not be a heavy decline, until the vacuum in the country resulting from deficient harvests, is supplied, from another heavy crop. Looking, then, to the general trade of the West, the above table may be taken as a reasonable basis for a comparison of the condition of the country for the several periods indicated. Seeing, then, that produce commands full prices, the next question is, how much produce have we for sale? Without particularizing it may be said that the aggregate surplus produce of the West is probably fifteen per cent. larger than at this time last year, and in the aggregate value there is a slightly greater increase. The crops of grain were much better in 1859 than 1858, but the stocks of old on the 1st of July, 1859, were very small, while on the 1st of July, 1858, they were large.

The stocks, therefore, at the close of Summer were not large in proportion to the increased product in 1859, as compared with 1858, but as remarked we have an excess, of probably fifteen per cent. in the aggregate. This is the condition of our available resources. We have now seen that there has been a decrease in the amount of Western indebtedness of twenty per cent., and an increase in means of fifteen per cent., making together thirty-five per cent. in favor of 1860—a favorable prospect certainly for the new year, and one every way calculated to inspire confidence, and to encourage enterprise. And in this connection, it may be remarked, that the foundations have been laid for the largest crop of wheat in Ohio, Indiana and Kentucky in 1860, that was ever harvested. The fall season was favorable for planting, and a very large breadth of ground was occupied. The plants, too, made satisfactory progress, and obtained a fine growth before the setting in of Winter, and now the protection by a covering of snow from the severity of the weather. Of course we can not calculate upon a heavy yield, from present appearances, as the crop is liable to suffer in various ways between this time and harvest, but everything, so far, promises as we have said, an extraordinary yield. It is our place now to be thankful for the favorable seed-time, while we look forward hopefully for a bountiful harvest. If, in the present condition of the country, such crops as may be expected in 1860 shall be realized, our people will experience a degree of prosperity, before the close of the year we have entered upon, that has never been equaled in the history of the West.—*Cin. Price Current.*

The following facts and figures are taken from the New York *Courier & Enquirer*:

The amount of dividends and semi-annual interest payable at this city next week is estimated at ten to eleven millions of dollars. At Boston the aggregate is about three millions. We annex a summary of the latter, prepared by Mr. J. G. Martin. The Massachusetts Railroads have been converted into dividend paying concerns, by means of advanced rates of fare:

RAILROAD COMPANIES.				
Jan.	Stocks.	Capital.	Dividends July Jan. 1859. 1860.	Amount Jan. '60.
9-Berkshire.....		\$320,500	12 11	5,619
2-Boston and Lowell..		1,830,000	*3 3½	61,450
2-Boston and Maine..		4,135,700	4 4	166,228
2-Boston & Providence.		3,160,000	3 4	126,400
2-Boston & Worcester.		4,540,000	3 4	180,000
2-Fitchburg.....		3,540,000	3 3	106,500
2-Metrop. (Horse)....		450,000	5 5	22,500
2-Middlesex, (Horse)...		295,100	4 4	11,204
2-Old Col. & Fall Riv.		3,015,100	3 3	90,453
2-Pittsfield & N. Ad's.		450,000	3 3	13,560
2-Prov. & Wor.....		1,550,000	3 3	46,510
2-Stoughton Branch...		85,400	3½ 3	3,416
2-Taunton Branch....		250,000	4 4	10,400
10-Waltham & Wat'tn.		20,000	4 4	800
2-Western.....		5,150,000	4 4	206,000
2-Wor. & Nashua....		15,220 sh.	\$2 \$2	40,440

Total.....\$1,083,910
*3½ regular, 1½ extra.

MANUFACTURING COMPANIES.				
2-Bates (Lew'tn, Me.)..		800,000	5 5	40,000
2-Cochecho.....		2,000 sh.	\$30 \$21	42,000
3-Contoocook (par 500).		140,000	4 4	5,600
10-Douglass Ax.....		300,000	5 4	12,000
2-Dwight Mills.....		1,700,000	3 3	51,000
2-Great Falls.....		1,500,000	3 4	60,000
2-Hill (Lewiston, Me.)..		400,000	5 5	20,000
2-Jackson, Nash., N.H.		600,000	2 3	18,000
*-Lanc. Mills, p. \$450.		200,000	4 4	36,000
2-Lowell Bleachery....		300,000	5 5	15,000
*-Mann. Print Works		1,800,000	5 5	90,000
15-Middlesex.....		500,000	- 4	20,000
*-Nashua.....		1,000,000	3 4	40,000
2-Naumkeag Mf. Co....		760,000	5 6	42,600
*-Pacific.....		2,430,000	- 4	97,200
2-Salmon Falls.....		1,000,000	- 3	30,000
*-Stark Mills.....		1,250,000	4 4	50,000

Total.....\$660,800
*Payable on demand.

INTEREST ON BONDS.				
2-Alb. 6's West. R.R....		1,000,000	3 3	30,000
2-Boston City Stock....		Interest.	- -	90,600
2-Boston Cit. Stock....		Principal.	- -	321,800
2-Bost. Con. & Mil R.R.		About.	- -	11,000
2-Bost. & Prov. R.R....		About.	- -	3,000
2-Boston & Wor.....		500,000	3 3	15,400
2-Cambridge (Horse) R.R.		150,000	3 3	4,500
2-Cheshire R.R.....		738,200	3 3	22,140
2-Dorchester & Milton.		25,000	3 3	750
2-Eastern R.R. 5's, '62,		in part.	2½ 2½	3,750
2-Essex R.R.....		213,610	3 3	6,408
2-Mass. State.....		175,000	2½ 2½	4,375
2-Do. East. R.R. Loan.		600,000	2½ 2½	12,500
2-Do. Nor. & W. R. Ln		400,000	3 3	12,000
2-North. R.R. 6's, '60.		23,400	3 3	714
2-North. R.R. 6's, '66.		Principal.	- -	23,400
2-Peterboro' & Shirley.		40,000	3 3	1,200
2-Portland City.....		About.	3 3	15,000
2-United States Loan..		About.	- -	25,900
2-Vt. & Mass. R.R....		1,000,000	3 3	30,000

Total.....\$633,143

MISCELLANEOUS.				
2-American Ins. Co....		\$300,000	10 10	30,000
2-E. Bost. Dry Dock....		250,000	3 2	5,000
2-East Bost. Gas Co....		133,000	4 4	5,320
-Fishing Bounties....		About.	- -	300,000
2-Mass. H. L. Ins. Co.		Interest.	- -	200,000
2-Merchants' Bank of		St. Louis, in part.	5 5	2,558
2-N. Am. Ins. Co.....		200,000	5 5	10,000
2-U. S. Hotel Co.....		298,500	3 2	4,170
2-Western R.R. S. F.		- -	- -	50,000

Recapitulation:
Miscellaneous.....\$697,248
Interest on Bonds.....633,143
Manufacturing dividends.....668,800
Railroad Dividends.....1,083,900

Total Jan., 1860.....\$2,992,891
Total July, 1859.....2,270,736
Total Jan., 1859.....2,435,342
Total July, 1858.....1,834,236
Total Jan., 1858.....1,083,732

Mr. Martin's Circular states that there are other Companies that will probably make dividends about this time, but not yet officially declared—among which are the Boston Exchange Company (quarterly); Firemen's Insurance Company; Hamilton Woolen (quarterly); Salisbury and Massachusetts Mills Manufacturing Companies. Also, Boston and Roxbury Mill Corporation, and New Bedford and Taunton Railroad. The Franklin Insurance Company have not yet decided as to their January dividend. The St. Louis Merchants' Bank dividends is to Boston Stockholders.

The following dividends have been paid during the month of December:

Companies.	Capital.	Div.	Amount.
Appleton Manufacturing Co..	\$500,000	5	\$30,000
Hamilton Manufacturing Co..	1,200,000	4	48,000
Lowell.....	2,900 sh.	\$40	116,600
Merrimack Manufacturing Co.	2,500,000	5	125,000
Passumpsic Railroad Bonds..	725,000	3	21,750
Portland & Saco R. R. div'd.	1,500,000	3	45,000

Total.....\$385,750

The total of dividends for January is larger than one year ago, and the list must be very satisfactory to the holders of the numerous stocks. The City of Boston pays off \$321,000 of maturing indebtedness.

Among the Railroads, Boston and Providence and Boston and Worcester have been increased 1 per cent., and Stoughton Branch ½ per cent.

Manufacturing stocks pay well, but do not show much increase in comparison with July, from the fact that the dividends then paid were a large gain on the previous six months. The Great Falls Company divides one per cent more; Jackson one per cent.; Nashua one per cent., and Naumkeag an increase of one per cent. The Salmon Falls Company divides three per cent., and this is the first dividend since January, 1857. The Pacific Mills Company pays its first dividend, and the Middlesex Mills the first since the re-organization of the Company. The Cochecho Company divides \$9 per share less than in July, and the Douglas Ax one per cent. less. The Lowell Company has changed its time of payment from January and July to June and December.

The Bonds of the Northern (N. H.) Railroad, to be paid off in January, 1860, were originally \$100,000, issued January, 1855, more than three-fourths of which have been purchased by the Company from time to time, and canceled.

VERMONT AND MASSACHUSETTS RAILROAD.—The annual return of the Vermont and Massachusetts Railroad to the Legislature, for the year ending November 30, 1859, has been received at this office. We make the following synopsis:—

Total earnings.....\$246,793 15
Total expenses.....140,481 01

Net earnings after deducting expenses.....106,317 14
Total amount of interest paid including amount paid to trustees of sinking fund.....57,422 03

\$48,895 11

This is nearly \$2 per share, or over 15 per cent. on the present market value of the stock.

In the amount of total expenses are included all the repairs to buildings and motive power, with all renewals and repairs of road, which together amount to \$89,320 51. The Company owe no floating debt.

GREAT WESTERN RAILWAY.—The following is a statement of the Traffic receipts for the week ending 30th of December, 1859:

Passengers.....\$14,423 09½
Freight and Live Stock.....18,310 33
Mails and Sundries.....1,410 56½

Total.....\$34,144 49
Total Corresponding week of last year.....32,802 26½

Increase.....\$1,342 22½

H. SHACKEL, Auditor.

Audit Office, Hamilton.
GRAND TRUNK RAILWAY OF CANADA.—Audit Office Montreal December 24, 1859.—Statement of Traffic Receipts for week ending Saturday, December 10, 1859:

Local Passengers 8,316.....\$13,027 26
Foreign Passengers, 1,182.....2,300 90
Emigrants do.....
Mails, Express, etc.....2,492 46
Local Freight and Live Stock, 3,939 tons.....25,226 78
Timber and Lumber 608,930 feet, 040 tons.....2,124 21
Firewood, 2,636 cords, 3,798 tons.....2,545 10
Foreign Freights, etc., tons 2,295.....10,238 65

Total....(970 miles).....\$57,945 26
Week ending Dec. 18, '58, (880 miles).....46,919 51½

Increase.....90 ".....\$12,874 74½

Total traffic from July 1st, 1859, to date.....\$1,272,700 54
For same period last year.....1,406,792 90½

Mileage and Receipts of St. Thomas Branch are not included in this return.

JOHN HARDMAN, Auditor.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned
THEODORE DEHON,
no13 10 Wal ar Broadway, New York

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
No. 67 West 6th St, bet. Walnut & Vine
CINCINNATI O

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANOR SANDOVAL

FOR

Decatur, Springfield,
Bloomington, Peoria,
Burlington, Quincy,
La Salle, Rock Island,
Dixon, Galena,
Prairie du Chien, St. Paul, and
St. Anthony,
And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANAMA for all the above points.

Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via

PANOR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all

TOWNS ON THE UPPER MISSISSIPPI

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

B. H. NICHOLS,
Gen'l Southern Agent, Cincinnati.

W. P. JOHNSON,
Gen'l Passenger Agent, Chicago.

Winter Arrangement, 1859-'60.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the West, South-West and North-West.

TWO TRAINS

Leave Wheeling daily at 12:35 P. M., and 10:10 P. M.

One Train leaves Parkersburg daily at 9:20 P. M.

Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.

Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2.

Time as quick and Fare as low as by any other ROUTE.

Inquire for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

E. F. FULLER,
General Western Agent.

L. M. COLE,
General Ticket Agent.

W. P. SMITH, Master Transportation.

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; and lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circular which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the retort is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet,.....	\$300 00
do do do 350 " " " " " " " " " " " "	335 00
do do do 400 " " " " " " " " " " " "	375 00
do do do 500 " " " " " " " " " " " "	450 00
do do do 600 " " " " " " " " " " " "	525 00
do do do 700 " " " " " " " " " " " "	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, as now in operation in several States, apply to

R. T. COVERDALE,

167 Walnut Street, Cincinnati, Ohio,

who has the exclusive right to manufacture and sell in the State of Ohio.

Feb. 24th, 1859.

APPLEGATE & CO.,
Booksellers, Publishers, Stationers & Blank Book Manufacturers,
43 Main St. Cincinnati O.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Booksellers, Country Merchants, and others to our extensive stock of School, Classical, Theological, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the leading publishers and importers of Paper and Stationery, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

BOOKSELLERS,

Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, Envelope, Manilla, and Tea wrap-boards, Envelopes, Gold and steel Pens, Penholders, Copying Presses, and Books, Ink and Stands; Erasers, Sealing Slates, Mucilage, Banker's cases, Bill Rests, Bill Envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files; Date Calendars, together with all other articles used in the counting-house.

Stationers,

To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly paged, including all sizes, from the small memorandum book to the large Imperial Ledger, and a variety of styles of workmanship, order of any description, with or without ruling and warranted to be in quality of paper, accuracy of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

BLANK BOOK MANUFACTURERS,

We are prepared to Print and Bind books of any description and in any style desired, at rates as low as the quality of work cut in this where. Our executing these branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Dray receipts, Cards, Circulars, or any other description of printing, will please bear in mind that we do such jobs despatch. Orders respectfully solicited.

Publishers

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, *Clark's Compendium*, *mentaries*, *Boles*, *Lin's Ancient History*, *Plutarch's Lives*, *Josephus*, *Spectator*, *Chain of Sacred Wonders*, *Familiar Science*, *Webb's Monitor*, *Solten's German*, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, Books of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

43 MAIN STREET, CIN.

W. HARVEY'S SAFETY JOINT For Coupling the Ends of "T" Rail PATENTED, NOV. 2, 1858.

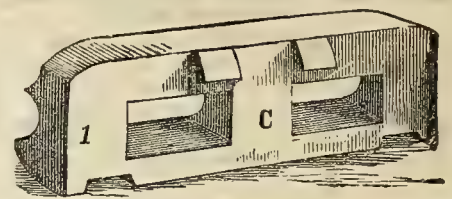


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

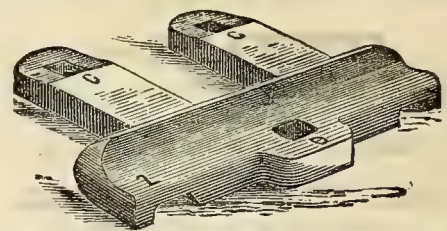
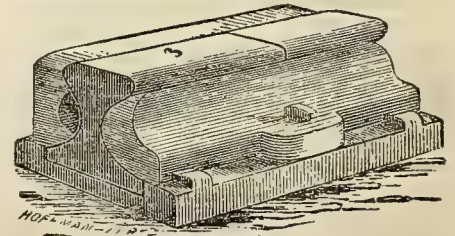


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that on one part assists and takes the strain of the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly safe road, thereby doing away with the breaking of rails, wheels and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
41 Jefferson street, Albany, N. Y.

PROSSER'S PATENT
ORIGINAL LAP-WELDED
IRON AND STEEL BOILER TUBES,
SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.
SOLE IMPORTERS.
PROSSER'S PATENT SURFACE CON-
DENSERS for high pressure steam, with sea or
other bad boiler water, gauges, 3-cutter drills, counter-
sinks, tube end cutting bars, expanders, tube scalers,
steel wire and whalebone brushes, pull lever wrenches,
tubes—plain or enameled, screwed together for Artesian
Wells, HOLLOW SLABS for various purposes, Steel for
Rollers. THOS. PROSSER & SON.
97 Jan. 28 Platt Street, New York.

W. G. LOBDELL. H. S. M'COMBS. D. P. BUSH.

BUSH & LOBDELL,
Wilmington - - - - - Delaware
MANUFACTURERS OF
CHILLED WHEELS

AND
TIRES,
For R.R. Cars & Locomotive Engines,
ARE PREPARED TO
Execute Promptly Orders to any Extent
FOR THEIR
CELEBRATED WHEELS,
EITHER SINGLE OR DOUBLE PLATE,
WITH OR WITHOUT AXLES

WHEELS FITTED
To Hammered or Rolled Axles.
In the best manner, at the shortest notice, and on the
Most Reasonable Terms.

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A Book for Every Business Man!
JUST PUBLISHED

—THE—
POST-OFFICE GUIDE!
For Post-Masters and Business Men.

CONTAINING
A Complete List of Post-Offices in the United States
and Territories, arranged by States and Counties; A
Complete List of all Distributing Post-Offices; Rates
of Foreign and Domestic Letter Postage; Rates of
Printed Matter, Transient and Regular; Abstract
of the Laws and Regulations of the Post-Office De-
partment, &c., &c.

COMPILED BY E. PENROSE JONES,
Late Assistant Post-Master at Cincinnati.
Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.
U. S. BLANK AGENCY, CINCINNATI POST-OFFICE,
January, 1859.

This work has been carefully compiled and corrected by
E. PENROSE JONES, Esq., late Assistant Post-Master of the
Cincinnati P. O., from the Records in this Department, and
other sources, and contains the most complete list of Post-
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South-Western States, yet published.

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The book makes an octavo pamphlet of about 100 pages.
The entire matter is kept standing in type, and as the com-
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Regulations of the Department, the information is corrected
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by no other work of the kind.

OBSERVE, That this list is arranged by States and Coun-
ties, making it especially valuable to business men. No
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Mar10.16

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SEWING MACHINES.

W. H. SUMNER & CO., cor. Fourth and Wal-
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BRANCH OFFICES:

Louisville, Ky., Columbus, O.,
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We offer the Wheeler & Wilson Sewing Machine, with
important improvements, at a reduction on former prices;
and to meet the demand for a good, LOW-PRICED FAMILY
MACHINE, have introduced a new style, working upon the
same principle, and making the same stitch, though not so
highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALIKE on
BOTH sides, impossible to unravel, and leaving no chain or
ridge on the under side, the economy of thread, and adap-
tability to the thickest or thinnest fabrics, have rendered this
the most successful and popular Family Sewing Machine
now made.

At our various offices we sell at New York prices, and
give instructions free of charge, to enable purchasers to
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tuck, all on the same machine, and warrant it for three
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Send or call for a circular, containing all particu-
lars, prices, testimonials, etc.

WM. SUMNER & CO.

1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th
Corby, Gossin & Co.'s make, for sale very
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172 Elm Street, bet. 4th and 5th,
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Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

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Compound Steam Pumping Engines



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Companies, Manufacturer
Distillers, Miners, and the pub-
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as the best Pump now in use,
and acknowledged by all who
have used them to be perfect—
are simple in their construc-
tion, compact, durable and not
likely to get out of order; well
adapted for Steamboats, Rail-
road Water Stations, Distille-
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Mines, Rolling Mills, Paper
Mills, Factories, Wells, Cla-
terns, Stationary Fire Engines, Garden Engines and, in
all purposes where a Pump can be used. Also, for for-
cing a large body of water to a great height or distance
rapidly.

Also, McGowan's Patent Ball Valve Pump, designed
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Bar of all Sizes,

And all Forgings for Railroad Machinery.

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This Iron is all made from best Juniata cold-blast char-
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New Time Table

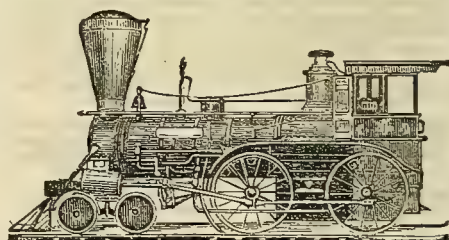
OF THE

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	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp.	7 00 A. M.	7 00 P. M.	7 00 P. M.
Mail	9 00 A. M.	12 50 A. M.	
New York Exp.	11 15 A. M.	9 00 P. M.	9 00 P. M.
Night Exp.	5 00 P. M.	4 00 A. M.	4 00 A. M.
Utica Accom'n.	6 00 P. M.	Ar. U. 10 00 P. M.	
N. Y. Mail	11 15 P. M.	10 0 A. M.	10 00 A. M.
	Leave Buffalo.	Leave Bridge.	Ar. Alb'y
New York Exp.	5 15 A. M.	5 15 A. M.	3 30 P. M.
Steamboat Exp.	8 00 A. M.	8 00 A. M.	8 00 P. M.
Mail			2 30 P. M.
Cleveland Exp.	6 00 P. M.	6 00 P. M.	4 40 A. M.
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Utica Accom'n.			10 00 A. M.

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P. DUDLEY,
President of the Board,

Jan.

The Railroad Record.

E. D. MANSFIELD, { Editors.
T. WRIGHTSON.

CINCINNATI:
Thursday Morning, Jan., 19, 1860.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
OFFICE—No. 167 Walnut Street.
SUBSCRIPTIONS—\$3 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

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One square, single insertion,.....	\$1 00
“ “ per month,.....	3 00
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If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

II The European Agents for the *Railroad Record* are Messrs. ALGAR & STREET, of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

LUXURIES.—In the State of Ohio, according to the recent census, there are 290,901 carriages, 83,683 watches, 3,352 piano-fortes. The numbers have been ascertained with a view to taxation; the values compared with the previous year being as follows:

	1859.		1858.	
	No.	Value.	No.	Value.
Carriages.....	290,901	\$10,246,043	284,931	\$10,251,925
Watches.....	83,682	1,661,758	81,922	1,641,965
Piano Fortes ..	3,252	1,103,195	6,602	1,026,800

The valuation is a low one, viz: \$36 for each carriage; \$20 for each watch; \$134 for each piano-forte. At the United States census for 1850, Ohio had within a fraction, one-tenth of the white population of the whole country. Assuming it to be so now, and that Ohio is a fair criterion of the other States, as to the quantities or numbers of the above articles in use, we may assume that in the whole country there now the following numbers of these articles, at a gross value of—

United States.	No.	Value.
Carriages.....	2,909,100	\$102,460,000
Watches.....	836,000	16,617,000
Piano Fortes.....	82,000	11,030,000
		\$130,107,000

The amount at present invested, and annually increasing, in watches, jewelry, plate, &c., may be estimated at hundreds of millions of dollars in the United States. Some manufacturers estimate the annual least quantity of gold and silver used in the Arts, at upward of five millions, in this country alone.

THE MONETARY WORLD.

We have the signs of another monetary crisis, unless it should be prevented, by some providential interference. With all the experience we have had now, for half a century, of successive commercial fluctuations, it will be a reproach to our commercial and financial sagacity, if we suffer another in so short a time, without foreseeing it, or taking some measures of prevention. But, so it is likely to be, if not soon, yet, in two or three years.

The cause of this flux and reflux in commerce and credit, is plain to every intelligent man. Yet, no man or community thinks it best or possible, to take any measure of precaution or prevention. The cause is simply *overtrading*. This arises from two other causes—*fashion*, (another name for luxury,) and the *haste to be rich*. So long as the majority of mankind can find either money or credit, to satisfy their tastes for dress, fine houses, and high living, they will do so; and so long as the merchant can find either money or credit, he will import or fabricate merchandise to supply these tastes, that he may grow rich on the profits. This produces *overtrading*, and this a financial crisis, in which there is a settlement of accounts. Those who can pay do pay; and those who can not become insolvent. When accounts are thus fully settled, trade recommences to “flourish,” as the merchants call it, and after going on a while, (more or less,) comes back to the same point. The string of credit is carried so far, that it snaps. Everybody is frightened. Everybody calls for a settlement, and a new financial “crisis” begins. We had one in 1819–20; another in 1837; another in 1841–2; another in 1854, and another in 1857. We should have had one inevitably in 1848–9, but for the providential arrival of California gold, which prolonged the period; but, we see, that 1857 followed quickly on 1854; and will not another follow quickly on 1857? This remains to be seen. The merchants and bankers of New York profess to think not; because they make their money out of foreign commerce, and will be glad to keep up that commerce to its highest point. But events will go on; whether they like it or not. It is a singular fact, that the *snapping of the cord* never begins, where it commences; or, is apparently the weakest, but, at the farthest and the strongest point. The system of expansion begins with the *consumer*, whose desires are constantly out-running his means; and with the retailer, whose desire to *sell* induces him to extend his credits. But the *break* don't begin there. It begins at the other end of the line, where the wholesale merchants and manufacturers having a hundredfold the means and credit of the small ones, extend their business, till it becomes unmanageable, and till the banker want his notes paid, and the foreign merchant wants his account settled.

This is generally begun at some unexpected moment, by some sudden failure, like that of the Ohio Life and Trust. But, that failure does not cause it. It is simply the first in a series of settlements. The great bankers, merchants and centers feel the shock much sooner and more violently, than the smaller ones; but, the shock finally reaches all, even those who owe nothing. Prices fall, and friends are injured. Now, as this occurs at intervals continually, why can we not take warning? Why does every man, woman and child begin to take credit, and extend credit, when they know that this is the cause of so much evil? But, especially, why do the bankers of New York, who have the power to reduce these credits, and keep them within bounds, suffer this expansion till they suffer with the rest?

Money is now comparatively scarce in New York, and other commercial cities. But, this in itself, we should not regard as evidence of any commercial crisis. Mid winter is the season of the greatest demand for money, and we are not surprised at it. The difficulty lies in a very different quarter. *The balance of trade* is immensely against us. Now, the men who live on foreign trade, generally laugh at the “*balance of trade*.” They profess not to think much of such a thing. They think it is not much of a show. Yet, *that* is the very thing which swamps them. The nose on a man's face is not plainer, than that there must be a balance, and settlement of accounts among nations as well as individuals. If that balance is against any one nation, it can no more get along without payment, than can any one man. Well, what has happened to this nation, in the last twelve months? Why we have paid *sixty-five millions of dollars in gold*, for our foreign luxuries. The importers say—well, this is no more than that amount of potatoes, since we raise gold as well as potatoes. But, *we have exported more gold than we raised*. What do they say to that? Nothing. But, is it true, that gold and potatoes are the same in trade? Let us see. The New York bankers must pay gold, not potatoes, to their customers. Let us see the effect of this. In the spring of 1858, the New York bankers held *thirty-four millions* of dollars in gold. To day they hold *seventeen millions*, having lost half of all their specie reserve in less than two years. Within anything like the current of trade we have had in the past year, the New York banks will suspend payments in twelve months. They probably will not. Why? Because they will curtail discounts, and cause a reaction in commerce. Now, the effect of this will be about the same thing.

Their must be a *reduction of foreign trade*, and with it, a reduction of credits. In this, the interior States will suffer very little. But,

all speculative operations will be again checked. If this is done gradually, the commercial shock will be light. If suddenly, it will be violent. It may be that commerce will be gradually slackened; in which case, the general prosperity of the country will be increased, and the really good and profitable operations of commerce be placed on better ground.

ANNUAL RETURN OF PROPERTY AND TAXES IN OHIO.

There are few documents, more instructive or more interesting than that of the State Auditor of Ohio. This State has her *two and half millions of people*. They are the most "well to do" and prosperous community in the world; taken in relative proportions of wealth, population, and industry. We say this advisedly, and challenge contradiction. The Auditor's Report contains the annual statements of property, products, and revenue. We have it before us, and some extracts and comments may be interesting. It is impossible to reprint the entire tables accompanying this report, and, as there has just been a new land appraisal, which will not become the basis of taxation till next spring's assessments, we will here refer only to the statement of *personal property*. This is made up of the following particulars, viz:

1st value of Animals; 2d value of Carriages; 3d value of Watches; 4th value of Pianos; 5th value of Merchants' Stock; 6th value of Manufacturers' Stock; 7th value of Money; 8th value of Bank Accounts and Credits; 9th value of Stocks and Bonds, not listed, in Ohio; 10th all other non-enumerated property.

The values are thus expressed:

	Number.	Value.
Horses.....	692,503	\$38,698,178
Cattle.....	1,802,872	21,416,872
Mules.....	8,306	559,475
Sheep.....	3,366,073	5,442,984
Hogs.....	2,242,812	4,747,526
Aggregate.....	8,112,566	\$70,864,735

In this appraisal mules are valued high enough, cattle and sheep about right, but, horses and hogs too low, the latter, because the law only numbers these above six months old, cattle on the other hand include all the calves and yearlings. The other articles are:

These appraisments are very nearly correct.

A community no larger than that of the State of Ohio, which keeps three hundred thousand wheeled vehicles, eight thousand watches, and puts music into eight thousand pianos must be a rich people. With the exception of farm wagons, none of them are necessary even to a comfortable life, and for the most part they are mere evidences of fashion,—the goddess, which

has taken the place of Diana of the Ephesians.

The capital employed by Merchants, and Manufacturers, and the cash people keep on hand is a very interesting part of the general investments of Society. This part of the Auditor's return, we transcribe for the benefit of our readers.

Counties.	Merchants' Stock.	Manufacturers' Stock.	Value of Moneys.
Adams.....	\$91,425	\$27,026	\$150,380
Allen.....	96,630	18,886	91,610
Ashland.....	101,073	43,457	266,760
Ashtabula.....	133,528	43,432	109,514
Athens.....	115,620	29,457	121,034
Auglaize.....	62,182	23,377	86,559
Belmont.....	239,131	56,460	486,681
Brown.....	209,244	785,808	346,004
Butler.....	306,605	230,992	875,683
Carroll.....	50,237	18,102	89,566
Champaign.....	204,312	104,543	187,445
Clark.....	261,100	170,477	568,381
Clermont.....	165,852	49,166	421,735
Clinton.....	154,333	31,273	141,775
Columbiana.....	221,954	69,058	281,720
Coshocton.....	98,555	28,519	221,529
Crawford.....	147,332	48,006	140,275
Cuyahoga.....	808,283	225,923	309,772
Darke.....	123,634	32,792	256,904
Defiance.....	54,329	16,936	38,814
Deleware.....	136,970	44,284	126,695
Erie.....	201,716	69,109	138,562
Fairfield.....	209,981	61,559	746,863
Fayette.....	73,454	14,631	136,430
Franklin.....	767,613	302,151	663,739
Fulton.....	21,197	1,529	26,637
Gallia.....	117,637	43,655	250,609
Geauga.....	84,608	8,978	58,278
Greene.....	272,573	185,854	542,214
Guernsey.....	128,322	27,271	209,910
Hamilton.....	10,276,193	4,179,252	3,446,733
Hancock.....	128,643	15,210	130,087
Hardin.....	56,170	8,684	70,876
Harrison.....	112,648	11,917	159,795
Henry.....	11,034	4,196	25,913
Highland.....	235,915	26,600	423,245
Hocking.....	70,859	38,232	100,977
Holmes.....	67,220	25,836	235,555
Huron.....	168,898	59,581	95,604
Jackson.....	69,447	68,191	82,455
Jefferson.....	178,838	65,499	303,623
Knox.....	182,630	32,668	207,073
Lake.....	102,984	31,143	139,298
Lawrence.....	129,048	182,471	255,801
Licking.....	269,531	62,927	366,470
Logan.....	144,128	49,503	150,400
Lorain.....	142,012	34,905	95,500
Lucas.....	336,025	55,240	74,710
Madison.....	116,856	32,226	149,636
Mahoning.....	175,857	65,197	216,806
Marion.....	92,793	21,359	182,193
Median.....	119,225	27,003	152,417
Meigs.....	182,082	86,364	161,368
Mercer.....	17,696	12,172	22,892
Miami.....	295,071	78,343	349,329
Monroe.....	89,149	46,478	172,288
Montgomery.....	784,788	345,728	1,420,424
Morgan.....	153,357	26,125	136,019
Morrow.....	117,840	14,217	93,729
Muskingum.....	475,212	134,956	571,468
Noble.....	51,600	12,898	145,966
Ottawa.....	22,668	6,495	29,940
Paulding.....	7,857	599	8,405
Perry.....	69,544	15,101	83,463
Pickaway.....	229,463	37,192	390,795
Pike.....	61,567	45,915	197,819
Portage.....	192,695	31,225	155,034
Preble.....	173,556	48,414	363,984
Putnam.....	31,468	7,999	60,355
Richland.....	197,162	70,664	175,876
Ross.....	292,579	95,457	695,122
Sandusky.....	108,501	38,889	172,761
Scioto.....	353,077	160,676	550,272
Seneca.....	102,689	54,931	416,680
Shelby.....	84,948	28,035	87,184
Stark.....	376,025	107,947	665,902
Summit.....	264,492	139,147	111,204
Trumbull.....	217,717	72,423	94,898
Tuscarawas.....	167,963	53,714	23,308
Union.....	54,837	12,189	43,518
Van Wert.....	35,916	8,387	35,308
Vinton.....	57,932	36,870	91,337
Warren.....	225,992	107,192	585,715
Washington.....	236,879	83,328	196,105
Wayne.....	172,441	51,463	535,536
Williams.....	51,268	9,445	16,621
Wood.....	17,923	3,690	51,218
Wyandot.....	83,946	26,304	59,158
Total.....	24,982,604	9,313,993	24,622,276

It is impossible to say, how near this is to be truth, but, as a large proportion of the persons, who return their property are honest, conscientious people, we may presume this is an approximate to the truth. It will be observed, that *one third* the entire amount is in the county

of Hamilton, which contains but *one tenth* the population of the State. This shows the tendency of active capital to center in large towns. It will be observed, that there is a larger amount of cash on hand, in some form, than would at first be supposed. This is in addition to \$2,748,000 of United States Bonds, or, State stocks held out of the State. In all there are *twenty-seven millions* of dollars, in cash, or, its equivalent. There is a great difference in this particular. The county of Montgomery (Dayton) held a larger proportion of *active capital* than any other county except Hamilton, and in looking into the value of property, and growth, we find that Dayton stands on better ground (*relatively*) than any town in the State. This is mainly in consequence of the greater amount of disposable capital, which can be affixed to manufactures, or any profitable improvement.

The amount of credits and book accounts is \$56,086,076 and the value of non-enumerated credits \$20,367,184. The whole amount of personal property is assessed at \$230,000,000. This is about one fourth the total amount of property, one half being in farm lands, and one fourth in town property.

The entire property of the State is very nearly \$900,000,000. On this is paid a general aggregate of \$10,000,000, *one third* only being for State purposes, and the other two thirds for *local uses*. The taxes are therefore not the same, by any means, in each county and township, for in some townships, in consequence of local taxes, the rate is double that in the whole rate. The average rate of the State is 11 mills, but there are townships, in which the rate is 30 mills. On the whole Ohio is not taxed so much as some States, but, on the other hand much more than in others.

RAILROAD MEETING IN WASHINGTON COUNTY, KY.—At a meeting of the citizens of Washington county, Ky., held at the Court House in Springfield on Friday, the 6th of January, 1860, to take into consideration the importance and practicability of constructing a railroad from Bardstown to Danville—

On motion, Dr. R. C. Palmer was called to the chair and Jas. P. Barbour appointed secretary.

Several short speeches were then made by the President and other members of the meeting showing the necessity and value of the undertaking, the length and probable cost of the road, its connection with other roads, its commercial value, etc., etc., and the resources that might probably be brought to bear for its construction.

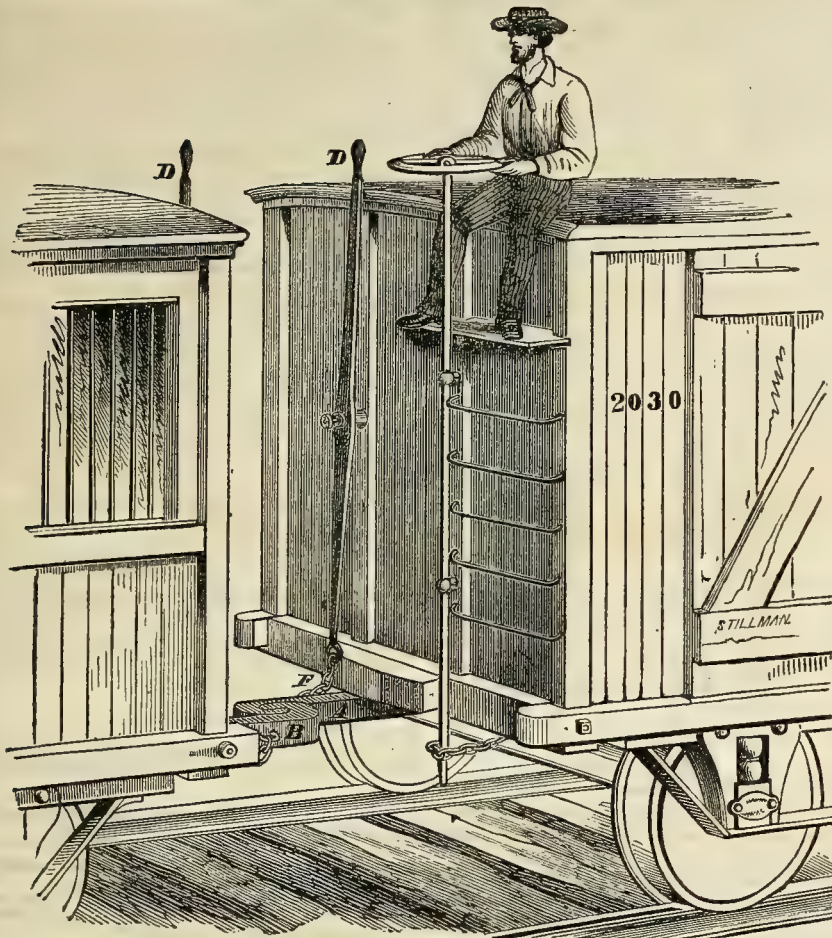
On motion, the following gentlemen were appointed a committee, viz: R. J. Brown, Hugh McElroy, William E. Riley, C. T. Cunningham, R. C. Palmer, James P. Barbour, and E. L. Davison, to correspond with persons in the various localities interested in the enterprise, with a view of collecting facts to be reported at a subsequent meeting; also for the purpose of petitioning the Legislature in regard to a charter.

The meeting then adjourned.

R. C. PALMER, *Pres't.*

JAS. P. BARBOUR, *Secretary.*

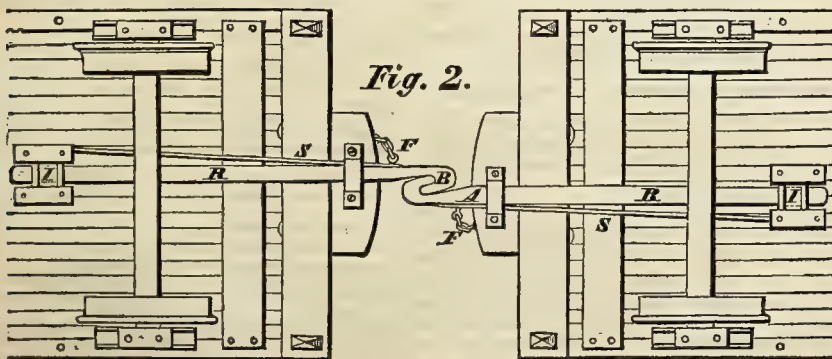
ADAMS' PATENT CAR COUPLING.



We have many inventions for the purpose of facilitating the coupling and uncoupling of railroad cars; but notwithstanding the number in use, it would appear that perfection has not yet been attained in any, as inventors still continue to devise and patent "new and improved car couplings."

letters of reference apply in both figures to similar parts of the invention.

A and B are the two coupling latches attached to two contiguous trucks or cars; the heads of these latches are constructed each with an inclination and hook so as to form a catch—when the two catches come together,



Our engraving represents an improved self acting car coupling, recently invented by Mr. L. Adams, of this State, and patented on the 30th day of December, 1859. Fig. 1 shows in perspective the contiguous ends of two railroad cars, fastened by Mr. Adams' device: Fig. 2 is a plan, looking upward, of the bottoms of the two cars, showing the arrangement and action of the couplings, and also showing the manner in which the are made to act as buffers when the cars come together with force. Similar

they slide past each other on their inclined surfaces, until, having passed the hook, they spring to upon each other and lock, fast, as shown in Figs. 1 and 2. S shows a strong spring which pressing against the coupling latch presses it back into place after being forced in a contrary direction as before explained.

In order that the cars be uncoupled without the guards or brakemen leaving their places on the roof of the cars, a chain, F, is attached

to each coupling latch, and also to a lever, C, which is pivoted on the end of the car, and is furnished with a handle, D, within reach of the brakeman. By means of this lever and chain (the cars being pushed close together), the coupling latches may be retracted, and the cars thus uncoupled in an easy and rapid manner.

By referring to Fig. 2, it will be seen how the coupling is made likewise to perform the office of buffer, when the cars run together: R is the shank of the coupling latch, and is prolonged into an india rubber spring, I, fixed on the bottom car: when the cars "bump" together, the latch shank presses against the india rubber spring, which thus tends to deaden or break the force of the collision.

There is much ingenuity displayed in the construction of this device, and there can be little doubt that by its adoption, the coupling of cars would be considerably facilitated: whether it is the *ne plus ultra* of inventions in this line, it would, perhaps, be premature and presumptuous in us to say.

Those desiring further information should address the inventor and patentee, Mr. Luther Adams, Blanchester, Ohio.—*Cin. Artizan*.

PHILADELPHIA, WILMINGTON AND BALTIMORE R. R.

WILMINGTON, Jan. 9th, 1860.

The Directors respectfully submit to the Stockholders the following statement of the operations of the Philadelphia, Wilmington and Baltimore Railroad Company, for eleven months, ending Oct. 31st, 1859.

The change in the termination of the fiscal year from November 30th to October 31st, has become necessary to comply with a law passed by the Legislature of Pennsylvania, requiring all Railroads, wholly or in part in the State, to make annual returns ending Oct. 31st.

Revenue of the Philadelphia, Wilmington & Baltimore Railroad, for eleven months, ending October 31st, 1859.

From Passengers.....	\$718,471 18
" Freight and Express.....	238,794 81
" Rents.....	16,918 76
" Mails and Miscellaneous.....	41,178 99

Total revenue Phil., Wilmington and Baltimore R. R.....\$1,014,963 74
Revenue New Castle and Frenchtown Line:

From Passengers.....	\$10,408 36
" Freight and Express.....	9,864 63
" Rents, Mail and Miscellaneous.....	922 52

Total revenue New Castle and Frenchtown Line.....21,195 51

Total Revenue of both Lines for Eleven months.....\$1,036,159 25

EXPENDITURES FOR THE ELEVEN MONTHS.

Interest on bonded debt, ground rents, etc., less interest received.....	\$136,000 00
All expenditures of the Philada., Wilmi and Balt. Railroad, including maintenance of way, renewals and construction of all new works.....	412,070 98
Expenditures of the New Castle and Frenchtown Line.....	11,415 25
Taxes and Bonus to State of Delaware and New Castle County....	10,136 67

Total Expenditure of all kinds, including taxes and bonus to State of Delaware and New Castle county, interest, construction and renewals.....568,652 90
Add loss in operating the Delaware R. R. eleven months.....30,007 34
\$598,650 24

Which total deducted from revenue, leaves net revenue for eleven months.....437,408 01

There was declared and paid April 1st, 1859, a dividend of 3 per cent.....162,000 00
Also, October 1st, 1859, a dividend of 3 per cent.....162,000 00

Total dividends.....\$336,000 00

The dividend accounts are from the revenue of six months ending February 28th and August 31st, and do not correspond with the financial year. The net earnings for the year ending August 31st, 1859, and on which the dividends were declared, were \$447,938 90, leaving a surplus of \$111,968 90, after paying all expenditures for operating the road, loss on the Delaware railroad, also for all new work such as new bridges, new track and new cars, engines, etc.

It will be seen by reference to table C, that the expenditures of the Philadelphia, Wilmington and Baltimore Railroad, have been only 41 60-000 per cent. of the gross revenue, and that these expenditures include every thing, there being no construction or renewal account. The operating expenses proper including new work and improvement, are 37 40-100 per cent. of earnings.

The Revenue and Expenditures for the corresponding eleven months, ending Oct. 31st, 1858, were as follows:

Philadelphia, Wilmington and Baltimore R. R.	
Passengers.....	\$705,555 74
Freight and Express.....	929,830 69
Rents.....	14,913 75
Mails and Miscellaneous.....	40,920 63
Total revenue P., W. & B. R. R.....	\$991,299 72
REVENUE—New Castle and Frenchtown Line:	
From Passengers.....	\$9,495 74
“ Freight and Express.....	7,94 16
“ Rents, Mails and Miscellaneous.....	1,031 29
Total revenue N. C. & F. T. Line.....	18,471 18
Total revenue of both lines for eleven months, ending Oct. 31st, 1858.....	\$1,009,650 90

EXPENDITURES FOR ELEVEN MONTHS, ENDING OCTOBER 31, 1858.

Expenditures Philada., W. & B. R.	
Railroad.....	\$563,397 84
Expenditures N. C. and F. Town, including taxes and bonus.....	22,989 21
Loss on Delaware R. R.....	41,005 68
Total expenditures on both lines, including renewals, new work, and taxes and bonus.....	\$627,392 73
Which deducted from Revenue, leaves net revenue for eleven months ending October 31, 1858.....	\$382,258 17

The above items of expenditure were \$23,732 49 less for the eleven months ending October 31, 1859, than for the corresponding eleven months of 1858, and the revenue was for the same time \$26,508 35 more, thus showing a net result of \$55,240 84 better than for the same in 1858.

In the account with the Delaware Railroad that road is charged with the expense of operating, and credited with the proportion of earnings due to it. The proportion of earnings due to the Philadelphia, Wilmington and Baltimore Railroad is added directly to our own revenue. In order, therefore, to understand the relation of the Delaware Railroad to our own road, the following explanations are necessary:

During the eleven months ending October 21st, 1859, the Delaware Railroad has increased the revenue of the Philadelphia, Wilmington and Baltimore Railroad, and that of the New Castle and Frenchtown and New Castle and Wilmington Railroads, by reciprocal business, \$78,485 15.

If we charge to this increased revenue the average rate of expenditures on our own railroad, or 40 60-00 per cent. of the gross revenue, there will remain to the Philadelphia, Wilmington and Baltimore Railroad, as profit from this business, \$46,620 18, from which deduct the loss, in operating the Delaware Railroad \$10,007 34, there remains \$16,612 84

as an absolute profit on the business derived from that source.

The country is constantly improving along the Line of the Delaware Railroad, the population rapidly increasing. The products of the peach orchards that have been planted within the last three years, will soon furnish more than one entire freight train daily, during the season. This road is now extended to the State Line, from whence it will be built by a company in Maryland to the waters of the Chesapeake. When it reaches this far it will enable us, without impairing the business of our own Line, to compete successfully for cheaper freight and passengers with the outside steamers now taking so large a share of the business from the South, directly to New York. For a number of years past, these outside steamers from Savannah, Charleston, and Norfolk and Richmond, have taken all the freight, and many of the passengers, to and from the South, indeed all the passengers who have not had business to call them through Washington, Baltimore or Philadelphia; and thus, while our Southern business has remained stationary, or increased but little, the great increase of intercourse between the North and the South has gone to build up a powerful and rival interest to the railroad. Much of this business that has been thus diverted from us, can, by means of the Delaware Railroad extension, be brought back upon the land, while the improved connections at Washington with the Southern lines, the better paying business in both freight and passengers can be attracted that way.

BONDED DEBT.

Of the new loan authorized by the stockholders of \$2,600,000, there has been disposed of \$2,185,000, of which \$2,000 has been redeemed and canceled.

There has been exchanged and paid off of the Loan due July 1, 1860, \$2,006,291 05.

There now remains unexchanged and unpaid of the Loan due July 1, 1860, \$145,485.

The loan due April 1, 1858, of \$144,000, has been paid, as was stated in the last Report, from Revenue. In the payment of the above Loans, due April 1, 1858, and July 1, 1860, there has been used of the current revenue of the Road, \$124,524 80. This sum may be regarded as a surplus invested in the Bonds of the Company.

The balance of the loan due July 1, 1860, will not be easily liquidated from revenue, and other available means of the Company.

NEW IRON, NEW TRACK AND NEW WORK.

For the eleven months before referred to, there has been relaid 9 67-100 miles of track, in relaying which 883 tons of new iron have been used, and 21,662 new cross ties. The track is believed to be now in better order than it ever has been. It is yearly improved by new ballasting, and more thorough drainage. The light rail of 50 lbs. per yard, is still found to answer a better purpose upon the whole than the heavy rail of 65 lbs., for the reasons heretofore given, that a better quality of iron is obtained, and a better manufacture in the light than in the heavier rail.

ACCIDENTS.

There has been no serious accidents so far as property is concerned, except two by fire. The first the burning of the Machine Shop, and Planing Mill and Saw Mill at Wilmington, occurred in 1859. The buildings were almost entirely consumed, and two locomotives, and all the machinery considerably damaged. The buildings have been replaced by those of a far superior character, and all the machinery

has been repaired and replaced, and some new added. The two engines have been also rebuilt and repaired.

The fire at Baltimore occurred May 13th, 1859, and almost entirely destroyed the engine house and blacksmith shop, burning up all the combustible parts of five locomotives and tenders, and damaging the machine shop and machinery.

The Engine House, Blacksmith Shop and Machine Shop, have been rebuilt with fire-proof roofs entirely of iron. The whole structure is now a much more complete one than before the fire. There is little or no risk for the future, as there are no combustible materials in the building except the doors.

The losses and damages paid on Freight business amounting to \$238,974 81 have been only \$615 50. The whole cost of accidents, excepting those by fires, has been \$3,158 53. This includes all runs off the track, all damage to cars and engines caused by the same, all breakage of wheels and other machinery, and the damage done to one locomotive by explosion.

The cost to October 31, 1859, of rebuilding the Machinery Shops burnt at Wilmington and Baltimore, and also repairing and rebuilding the Tools, Engines and Fixtures, including one new Engine to make good depreciation by these fires has been \$44,116 92. We have received from Insurance on the same, \$23,790 94. The balance (\$15,325 98) has been charged as an expense upon revenue.

COAL BURNING.

The plan of burning coal in our locomotives has been pursued with very satisfactory results.

The Dimpfel Engine Daniel Webster has run 29,563 miles—

Cost of Coal consumed.....	\$1,661 98
Cost of Wood for kindling.....	147 19

Total cost of Fuel consumed.....\$1,808 17

Cost per mile run, 6 11-100 cents.	
Number of pounds of Coal per mile, 32 41-100.	
Cost of repairs per mile run, 3 7-10 cents.	
Trains run the Great Express down and Night Line up.	
Average speed down, 28 1/2 miles per hour. Speed up, 28 miles per hour. Average cars down, 9. Average cars up, 10 1/2.	

The Dimpfel Engine Henry Clay has run passenger and freight trains, 24,325 miles.

Cost of Coal consumed.....	\$1,134 94
Cost of Wood for kindling.....	190 88

Total cost of Fuel.....\$1,925 82

Cost per mile run, 7 91-100 cents.	
Number of pounds of Coal per mile run, 41 3-10.	
Cost per mile run for repairs, 4 7-10 cts.	
The train run has been generally a heavy one.	
These two engines were built by Fairbanks, at Taunton.	
The Dimpfel Engine Christiana has run 10,232 miles.	
Cost of Coal consumed.....	\$701 30
Cost of Wood for kindling.....	99 37

Total Cost of Fuel.....800 67

Cost of Fuel per mile run, 7 83-100 cents.	
Cost of repairs per mile run, 8 4-10 cents.	
Number of pounds of Coal per mile run, 40 20-100.	
This was an old wood burner altered by the New Castle Company.	
The Dimpfel Engine George Washington came on to the Road July 14th, 1859, and has run 11,028 miles on the Great Express Train down, and night Line up and on the Mail and Express Trains.	

Cost of Coal consumed.....	\$559 28
Cost of Wood for kindling.....	57 19

Total cost of Fuel.....\$596 47

Cost of Fuel per mile run, 5 41-100 cents.	
Cost of repairs per mile run, 1 4-10 cents.	
Number of pounds of Coal per mile run, 30 42 100.	
This Engine was built by Baldwin & Co., Philadelphia.	
The Dimpfel Engine, John E. Thayer, also built by Baldwin & Co., came on the Road October 19th, 1859, and has as yet run but a few trips over the Road. It has proved, however, thus far entirely successful.	
The Engine Samson, came on the Road as a Coal burner, August 1st, 1859, and has run, 5,261 miles on Freight Trains exclusively.	

Cost of Coal consumed.....\$421 90
Cost of Wood for kindling.....48 75

Total cost of Fuel.....\$470 65

Cost of Fuel per mile run, 7 04-100 cents.

Cost of repairs per mile run, 3 40 100.

Number of pounds of coal per mile run, 38 08-100.

The above engine was originally a New Castle Engine, in which a new coal burning boiler was placed.

The Engine Morris, a New Castle Engine referred to in the last Report as a coal burner altered from a wood burner, on Mr. Bullock's plan, has run 27,104 miles.

Cost of Coal consumed.....\$1,684 29
Wood for kindling.....215 16

Total cost of Fuel.....\$1,899 45

Cost per mile run, 6 99-100 cents.

Cost of repairs per mile run, 4 5 100 cents.

Number of pounds of Coal per mile run, 36 13-100.

The train run by this engine has been the mail train down and up, and a part of the time the express train up and the night line down. The average cost of wood for the above trains would have been about double that of coal.

RAILROAD CONNECTIONS.

The connections South and South-west have been improved and extended since our last Report. The extension of the Orange and Alexandria Railroad to Lynchburg will be completed during the present month, and the Mississippi Central Railroad about the same time. The route across Florida from Fernandina to Cedar Key, will soon be finished, and become an important tributary. By these improvements the time between New Orleans and New York will be reduced to about four days. Several other routes at the South are also progressing towards completion, all calculated to increase our business. At the West, the Marietta and Cincinnati Road will soon be in working condition, and will be a valuable tributary. A very important connection at Washington has also been projected, by which the Washington Branch will be extended to the Potomac River, thus doing away with the use of Omnibuses for Southern and South-western travelers at that point. Every one who has traveled this route by night or day, will readily appreciate the value of this improvement. Independent of its value to passengers, it will give us, in connection with the extension of the Orange and Alexandria Road, the command of a large and valuable Freight business which has heretofore gone in other directions, by much longer and more circuitous route.

TRACK.

The track is in first-rate condition in all respects.

SUSQUEHANNA FERRY.

The boat has made every trip according to schedule, and answered as heretofore all the demands of the business of the road. The boat and ferry have been kept in thorough repair.

BUILDINGS AND FIXTURES.

The buildings and fixtures have all been kept up in good order. The roof of the front part of the depot at Philadelphia has been newly covered with lead tin, and preparations are now making to cover the rest of the building with iron. Great improvements have been made at Southwark, on the Delaware. Seventy-one hundred and fifty-four square feet of land have been made by filling up the Dock; and a new building, 55 by 100 feet, is now being built for the accommodation of the through freight from New York to the West and South-west, and tracks and pens are also to be arranged for the transfer of cattle from the West to New York. The boats of the Camden and Amboy Railroad, now come daily to this depot with the through freight, from New York,

which is rapidly increasing and is destined, at no distant day, to form a very important item in our revenue. The terminus of the Pennsylvania Railroad has now been fixed at South-work, and will be reached over our Road from Gray's Ferry Bridge, the use of which will add considerably to our revenue and diminish the expenses on that part of our Road.

NEW TICKET SYSTEM.

This system still continues to give universal satisfaction, and has prevented many of the frauds heretofore practiced upon the road by travelers under the old system.

FREE PASSES.

Free passes are still a source of great annoyance, and will remain so until some more uniform system is devised and put in operation by all the roads. The difficulty seems to be in deciding between those who are really entitled to this courtesy, and those who have no claim to it. Those who have the least claim are generally the most clamorous, while many of those who are really entitled to consideration in this respect, prefer paying their fare to being ranked among the motley throng of dead-heads.

The whole number of free passes for eleven months was 9,373, who rode equal to 540,670 miles for one passenger. Much the largest proportion of these were the employees and officers of our own road, and those of other roads having direct business relations with us.

THE CONTRACT SYSTEM.

This system still works well, and is productive of much saving to the company. It likewise promotes regularity in running the trains, and in all branches of our business. It diminishes accidents to both persons and property, by bringing home the responsibility directly upon individuals instead of the corporation.

POLICY OF MANAGEMENT.

We have seen no reason to change the views expressed upon this subject in our last report. We have encouraged business from every source that promised any profit. We have given especial attention to the cultivation of local business in both freight and passenger, believing that any new branch of business established on our line must result in our profit.

Finally, we congratulate the stockholders upon the substantial prosperity of their road. It is now established on a firm basis. Its earnings are certain. Its expenditures are brought within a certain and fixed ratio to earnings, and its dividends will be certain and reliable. Its resources are such that the road and fixtures can be, as they have been for some time past, constantly improved to meet the growing wants of the community without any increase of capital or diminution of dividends.

Respectfully submitted, by order of the Board of Directors.

S. M. FELTON, President.

BALTIMORE AND OHIO RAILROAD.—At the regular monthly meeting of the Board, the following report for the month of December, 1859, was read. The transportation Eastwardly, into the city of Baltimore, during the month, on some of the principal staples, has been as follows:

Bark, 126 tons; coal, 26,361; fire brick, 96; firewood, 21; flour, 74,269½ barrels; grain, 519 tons; granite, 72; iron, 551; iron ore and

manganese, 254; lard and butter, 349; leather, 212; cotton, 1,376 bales; wool, 149; flaxseed, 7 tons; soap stone, 12; lard oil, 80; lumber, 1,654; lime, 8; live stock, viz: Hogs, 25,818; sheep, 1,845; horses and mules, 149; horned cattle, 2,760; meal and shorts, 404 tons; pork and bacon, 1,743; tobacco, 114 bbls.; whisky, 9,985 bbls.; miscellaneous, 1,023 tons; hay, 35; hemp, 6; flour from Washington Branch, 3,810 bbls.

The Revenue for the Month has been as follows:

MAIN STEM.

Passengers.....	\$49,965 25
Tonnage.....	248,849 67
Mails.....	8,041 34
Express.....	6,321 24
	\$303,087 60

WASHINGTON BRANCH.

Passengers.....	\$23,187 34
Tonnage.....	6,865 17
Mails.....	1,000 60
Express.....	1,350 00
	32,342 51

NORTHWESTERN VIRGINIA.

Passengers.....	2,055 17
Tonnage.....	17,310 18
Mails.....	866 67
	20,232 02

Total.....\$355,662 13

	Main Stem.	Wash. B'ch.	N. W. Va.
Dec., 1858.....	\$377,781 00	35,602 31	22,818 94
" 1859.....	304,087 60	32,342 51	20,232 02
			\$19,459 88

LEHIGH VALLEY RAILROAD COMPANY.—The annual meeting of the Company was held a few days since. From the Annual Report we glean the following:

RECEIPTS.

Foam Coal transportation.....	\$391,766 81
" Passenger Express and Mail.....	68,161 70
" Miscellaneous Freight.....	65,937 97
Total.....	525,866 48

EXPENDITURES.

For Coal transportation.....	\$160,895 87
For Passenger, Express and Mail.....	28,085 76
For Miscellaneous Freight.....	22,991 07
Total.....	\$211,972 50

Balance net earnings.....	313,893 96
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Against which has been charged:

Interest on bonds.....	\$85,020 00
Current interest.....	8,257 86
Salaries and office expenses.....	6,359 40
Dividend.....	117,981 00

Total.....	\$217,518 26
Leaving a credit balance of.....	96,375 72

The whole amount of coal transported over the road was 577,651 tons, against 471,029 tons last year—showing an excess this year of 106,622 tons. This amount was distributed as follows:

	1859.	1858.
To the Belvidere Del. R. R.....	131,152	96,141 tons.
" Central R. R.....	182,222	122,000 "
" North Penna. R. R.....	77,483	66,123 "
" East Penna. R. R.....	3,579 "
" Catasauqua R. R.....	4,384	4,012 "
" Morris Canal.....	4,688	5,870 "
Delivered on line of Road.....	174,143	185,883 "
Total.....	577,651	471,029 "

Of the whole surplus of the receipts over the expenditure, 62,797 09 has been paid in new construction, and the balance applied to the liquidation of the debts of the Company. The total capital of this company is \$1,965,350, upon which the net earnings are about *eleven per cent.* Very few coal transportation companies in this State can show such a flattering and encouraging result. Mr. J. G. Fell is the President of the road; Mr. J. N. Hutchinson, Secretary and Treasurer. Managers—Asa Packer, William H. Gatzmer, John T. Johnston, R. F. Stockton, E. A. Packer, and David Barnett

THE PACIFIC RAILROAD.

The proceedings of the Convention held in San Francisco Sept. 20th, 1859, were of a most interesting and important character. The unanimity of feeling among the delegates composing it, gives satisfactory assurance that, so far as California citizens are concerned, they are more ready now to act than talk.

This Convention, called for the purpose of discussing and consulting upon the best plan for carrying out a great national project, was composed not simply of delegates from California, but from Oregon, Washington Territory, and the whole Pacific coast. It was controlled by no political, local, or sectional considerations; the delegates were elected directly from and by the people; the proceedings were harmonious, the views unanimous, and the conclusions practical.

The moral force and power of the action of this Convention has given a serious tone to the subject, and commends itself to the respect and support, not only to the people of the Pacific coast, but forms a rallying point around which the friends of the Pacific Railroad everywhere can gather.

The following is draft of the Bill, which has received the entire appropriation of the most prominent citizens of California, and indicates the plan of action resolved upon in asking United States Governmental aid from the present Congress.

The plan is simple. It asks for no money; it does not deplete the Treasury; it relieves government from participation in the management; it takes the matter out of the hands of politicians; it creates no new department or salaried officers; it affords no stepping stone to power; it enhances the value of the lands through which it is built; it leaves the question of route to be solved by capital. Under this Bill the South or the North may build the road, if they can present the most eligible route, and capital can be found to undertake it. It gives an impetus to California and her internal improvements, and insures the early completion of a railroad through the State of California, built with her own means and resources.

In accordance with this plan and his instructions, Mr. Theodore D. Judah, as the accredited agent of the Pacific Railroad Convention, is using every legitimate means to bring these important matters home to the attention of Congress. It is to be hoped, from the bottom of the Nation's heart, that negro squabbles will soon give place to the calm discussion of great projects like this, of far more real importance to the vital interests of a great and growing Republic like ours.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled:

That, for the purpose of aiding the construction of a line of railroad across that portion of the public domain lying west of and between the Mississippi river and the eastern boundary of the State of California.

1st.—The General Government hereby grants her guarantee or endorsement for the payment of the interest, at the rate of 5 per cent. per annum, for a period of thirty years, on the bonds of such company or companies as will undertake and construct the said railroad across the public domain.

2d.—The amount of the issue of the said bonds shall not exceed the sum of \$75,000,000 for a first class single track railroad; they shall be of the denomination of \$1,000 each, shall run for thirty years from the date of their issuance, and bear interest at the rate of 5 per centum per annum, with interest coupons at-

tached, payable semi-annually on the first days of January and July of each year thereafter, on presentation at the office of the Treasury Department of the United States in the city of Washington.

Said bonds shall be signed by the proper officers of the company, and shall constitute a first lien upon the property, assets and franchises of said company; they shall be secured by a first mortgage upon all the property, assets and franchises of said company, made out and delivered to the President of the United States as trustee, who shall hold the same for the benefit of the bondholders. Said bonds shall be convertible into stock at the opinion of the bondholder; and each bond shall have written or printed upon it the words "Interest guaranteed by the United States Government," and be signed by the Secretary of the Treasury Department, or by some proper officer of the Treasury Department, specially deputed or appointed by the Secretary of the Treasury for that purpose.

3d.—The mode and manner of the issuance and guarantee of said bonds shall be as follows: Said company or companies shall deposit with the Secretary of the Treasury an amount of cash equal to the amount of one year's interest on the bonds which they may from time to time decide to issue; upon the tender or payment of which deposit to the Treasury Department, the above mentioned guarantee or endorsement shall be made by the by the proper officer, as above provided, and the bonds delivered to the company or companies. The funds provided and deposited in the Treasury of the United States, shall be held by the Secretary of the Treasury in trust for said company or companies, subject to their draft any-time, for the payment of work performed and material furnished, or for cash actually expended upon the construction of said railroad, and each draft as presented shall be accompanied by the affidavit of the chief engineer and treasurer of said company or companies, to the effect that such work has been performed, material furnished, or cash actually expended in the construction of said railroad.

4th.—Said railroad shall be so constructed, and progress at such a rate, as to be entirely completed within ten years from the time such company or companies receive said guarantee.

5th.—Said railroad shall be made a first-class, T-rail, single track railroad, with all necessary turn-outs, sidings, and switches; but if said company or companies may elect to, and shall construct a double track railroad, they are hereby authorized to increase the issue of first mortgage bonds to the total amount of \$125,000,000; which amount shall be issued and guaranteed in the same manner and mode as provided above.

6th.—Said company or companies are left at liberty to and may locate the line of said railroad wherever they may deem their interests shall require; and the free right of way is hereby granted to said company or companies to strip of land four hundred feet in width across the public domain, with such additional quantity for the purposes of procuring earth, stone, or other material, also for slopes, depots, watering and way stations, side tracks, &c. as may be deemed necessary, not exceeding, however, the additional amount of five thousand acres of land.

7th.—It is further enacted that so soon as the route of said railroad is definitely fixed upon and located for the whole length of said railroad, there shall be set apart every alternate section of the public land for the distance

of twenty miles upon each side of said railroad, from the sales of which shall be created a fund for the purpose of meeting the payment of the interest which shall accrue upon the bonds of said company or companies so guaranteed by the general government; said lands shall constitute a special reserve, and shall be retained under the control and direction of the general government; they shall not be sold until after the construction of said railroad, or a portion of the same; but whenever any twenty continuous miles of said railroad shall be built and in operation the lands appertaining to the same, may be sold at either public or private sale by the land office, for such prices and at such times as President of the United States may direct.

Should any surplus arise or exist from the sale of such lands, over and above the amount needed for payment of the above mentioned interest, the same shall constitute a fund, to be applied to the liquidation of the principal of said bonds, which may be purchased at any time by the Secretary of the Treasury at a rate not exceeding their par value. The remaining alternate sections for ten miles upon each side of said railroad are hereby granted to said company or companies as each twenty continuous miles of railroad are completed and in operation; and in case any of said lands may have been sold, pre-empted, or otherwise disposed of, said company or companies shall have the right to select other lands in lieu thereof, within a distance of twenty miles on either side of said railroad.

8th.—It is further provided, that the government of the United States shall at all times have the preference in the use of said railroad, for postal, military, and all other government purposes, as well in time of war as in time of peace; and the said company or companies shall at all times convey and transport, without delay, all such government stores, munitions of war, of troops, &c. as may be offered, at rates not exceeding the regular rates charged for those purposes.

The said company or companies shall also carry the United States through and way mails upon their regular trains, and for such service shall be paid a sum not exceeding \$750 per mile, until otherwise provided by Congress.

9th.—It is further provided, that the customary duties upon all iron rails and other material used or to be used in construction of said railroad, are hereby remitted, and the same shall be allowed to pass duty free.

10th.—The period of one and one-half years from and after passage of this act is hereby allotted to such company or companies, for the purpose of making and completing the necessary examinations, surveys, and location of said railroad. Such surveys shall show, on a map of the line, from actual instrumental observation, the true position of the same, with its tangents, curves, and the radii of the same, the crossings of all rivers, streams, water-courses, farm, section, town, county, and State lines.

They shall show upon a profile a verticle representation of the line exhibiting the grades, cuttings, and fillings, the crossings of all rivers, streams, water-courses, the length and height of each piece of excavation, embankment, and tunnel.

They shall also be accompanied with a statement of the quantities of cubic yards of excavation and embankment, with haul of the same; the quantities of cubic yards of masonry, in piers, abutments, culverts, and all structures of masonry; the number of feet, board measure, of timber and lumber in all structures of wood;

and the number of pounds of iron therein consumed.

An estimate of the cost of the same shall be prepared, based upon the above qualities, which, added to the cost of superstructure, equipment, buildings, engineering and superintendence, shall present the actual cash cost of said railroad.

A board of engineers, to consist of three civil engineers, shall be appointed by the Secretary of the Interior, whose duty it shall be to examine the line as located, and the estimates of cost as presented, who shall report thereon without delay to the Secretary of the Interior.

Such surveys, maps, profiles, &c., shall be presented to Secretary of the Interior as soon as completed; and the power is hereby vested in the President of the United States to declare such company or companies the recipients of the above mentioned guarantee, as he may deem advisable, and for the interests of the general government.

The costs of such surveys shall form a proper item in the cost of constructing said railroad; and bonds may be issued upon the same, in the manner heretofore provided.

11th.—The provisions of this bill are intended for and shall apply only to a railroad across that portion of the public domain lying without the limits of the States.

12th.—It is further provided, that the property, franchises, and securities of this railroad, shall be forever exempt from taxation.—*Western R. R. Gazette.*

ORDER OF SALE OF THE MARIETTA AND CINCINNATI RAILROAD.

As the public are largely interested in the decree made by the Court of Common Pleas of Ross county, Ohio—Judges Dickey and Briggs on the bench—in the case of Henry Massie and others, against the Marietta and Cincinnati Railroad Company and others, on the 7th inst., we publish a very full and carefully prepared synopsis of it. Messrs. McClin-tick and Smith, of Chillicothe, appeared as counsel for the plaintiffs, who are holders of third mortgage bonds. Messrs. Henry Stanbery, Thomas Ewing, N. C. McLean and John L. Green for the 1st and 2d mortgage bondholders. Messrs. H. H. Hunter and John Welsh for the Company. Hon. S. F. Vinton for N. L. Wilson, Esq. Melvin Clarke, of Marietta, for a portion of the judgment creditors, and Messrs. Lincoln and Warnock, of Cincinnati, for the Lawrence Machine Shop. Hon. A. G. Thurman, of counsel for the Company, was not present, being detained by business elsewhere.

Henry Massie, et al,
vs.
The M. & C. R. R. Co.,
Jas. Winslow, Trustee,
N. L. Wilson, J.
A. Head, et al.

Ross Common Pleas.
Synopsis of decree
entered 7th Janu-
ary, 1860.

The counsel for the Company withdrew the demurrer heretofore filed in its behalf.

The plaintiffs dismissed the action as to N. L. Wilson, John A. Head and others, individual creditors of the Company, without prejudice, etc.

The findings of the Court were in substance as follows:

I. That the M. & C. R. R. Co. is a corporation with the powers, etc., as stated in the petition.

II. That said Company did execute and deliver the three several mortgages or trust deeds named in the petition, to-wit:

The first mortgage to James Winslow, dated first October, 1852, conditioned for the payment of the Company's bonds for \$2,500,000.

The second mortgage to James Winslow, dated first of May, 1854, conditioned for the payment of the Company's bonds for \$2,090,000.

The third Mortgage to Edwin Ludlow, dated 17th April, 1857, for \$1,500,000.

III. That all of said mortgages were recorded in the several counties through which the road passes, and that the same are severally valid as conveyances of the property, rights, privileges and franchises of said Company in said mortgages mentioned, and as security for the payment of bonds severally mentioned therein.

IV. That the whole of the bonds secured by said first mortgage were issued and are now outstanding, and that the Company has failed to pay the interest coupons attached to the same, and falling due 1st January and 1st July, 1858; 1st January and 1st July, 1859, and 1st Jan., 1860; and amounting, including interest from said several dates, to the rendition of the decree, to \$464,187 50.

V. That all of the bonds secured by the 2d mortgage were issued and outstanding, and that the Company has failed to pay the interest coupons falling due 1st Nov., 1857, 1st May, and 1st Nov., 1858, and 1st May and 1st Nov., 1859, and amounting, with interest to date of the decree, to \$374,850.

VI. That the bonds secured by the 3d mortgage were issued and are outstanding, and the Company failed to pay the interest coupons due 1st Sept., 1857, 1st March and 1st Sept., 1858; and 1st March and 1st Sept., 1859, amount at date of decree, \$282,763 50.

VII. That the conditions of said mortgages were forfeited, and the title to the property conveyed thereby to the Trustees had become absolute at law, subjected only to the equitable right to redeem the payment of the unpaid interest.

VIII. That said R. R. Company is insolvent, unable to pay its debts, to prosecute its business, to operate the road and repair its bridges, culverts, etc., so that passengers and freight and the agents and servants of the road may pass over it in safety.

IX and X. That certain chattel mortgages given to Niles & Co., and Barney, Parker & Co., have been partly satisfied by the delivery to them of the chattels covered by them, and are not liens on the property covered by said 1st, 2d and 3d mortgages.

XI. That the 1st mortgage constitutes the first lien on the Company's road and branches, made or to be made, the right of way, the land occupied thereby, the superstructure and tracks thereon, bridges, viaducts, culverts, fences, depot grounds, and buildings, appurtenances, and all franchises, rights and privileges of the Company in and to the same, as described in said mortgages, but this finding is not intended to, and does not determine, that the rolling stock, etc., on which the plaintiffs claim to have the elder lien by virtue of said third mortgages, is included in the description of the property named in the first mortgage, but that, and all other questions touching the claim of said third mortgage to such priority, is reserved for future decision.

XII. That the second mortgage is the second lien, except as to the rolling stock, etc., as to which the question is reserved.

XIII. That the third mortgage is the third lien on the property described in the first and second mortgages; but the Court being in-

formed that none of the rolling stock, etc., was owned by the Company at the date of said first two mortgages, but was acquired subsequently, and not now being advised whether said rolling stock, etc., falls under the exclusive lien of two pre-existing mortgages, or under the exclusive lien of said third mortgage, reserves that question for decision until the time arrives for the distribution of the proceeds of sale; and nothing in this decree shall be held to prejudice the right of the third mortgage bondholders to assert such priority, if such right they have, nor to prejudice the right of any creditor not a party to this suit, to assert any right or lien against said Company or its property, which may be superior to the rights or liens of said mortgage bondholders, nor to prejudice any right of the Lawrence Machine Shop to assert against the proceeds of sale any right which it may have to four locomotives claimed by it.

XIV. That said property, franchises, rights, privileges and appurtenances, and whether usually regarded as real, personal or mixed, can not be so divided as to be sold in parcels to advantage, but should be sold as an entirety, leaving the proceeds of sale for distribution according to the several rights of the parties.

ORDER OF SALE.

That unless the Railroad Company pay said several amounts of interest due as aforesaid, on said three mortgages, within five days, to Orland Smith, Receiver, then that said Receiver proceed to sell as an entirety, at public auction, at the door of the Court House in Chillicothe, Ohio, the said mortgaged premises, to-wit: The entire road of said Company and the branches thereof in the State of Ohio, made or to be made, finished or unfinished, and including the right of way, held and owned by said Company, and the lands occupied thereby, by whatever right the same may be held by said Company, and the superstructures and tracks thereon, and all bridges viaducts, culverts, fences, depot grounds and buildings thereon, and all other appurtenances belonging thereto, and all franchises, rights and privileges of said Company in and to the same, and also all the locomotives, tenders, cars, machinery, tools, implements, fixtures, wood, fuel, oil, waste and other materials or property owned by said Company, for the purpose of using or repairing said cars or any other of said property, and including as a part of said premises and appurtenances all turn-tables, water-stations, warehouses and lots, gravel pits, stone quarries and lands used in operating said road, or in connection therewith and owned and held for that purpose, and all shops and engine houses, all telegraph lines, posts, wires, instruments and fixtures, and all other property of every description used or designed or provided for the operating, repair, construction or reconstruction of said road or any part thereof, as all the same shall be held and owned by said Company, with all accessions thereto at the time of the sale thereof, on the notice and terms following:

The notice to be by five successive weekly publications, the first of which shall be at least thirty days prior to the sale, in at least one newspaper in each of the counties of Washington, Ross and Hamilton, in this State, and one in the city of New York. The sale to be for not less than \$200,000—but before the Receiver shall entertain any bid, he shall require the bidder to deposit with him \$100,000 in cash or \$500,000 in the first mortgage bonds of said Company as security for the pay-

ment of the bid in case the property should be struck off to such bidder, which deposit shall be forfeited to the uses of the trust in the Receiver's hands, if such bidder shall fail to pay the entire purchase money at and upon the entry of the order of distribution. The sale to be subject to the confirmation of the Court, and if confirmed the purchaser to receive possession of the premises and to hold and operate the same until the order of distribution, and then to retain the same as absolute owner on payments of the bid, or else surrender the same to the Receiver, and forfeit the deposit aforesaid, but such possession after confirmation and before distribution and full payment to be under the control of the Court, so as to compel the surrender of such possession on good cause shown.

The right to set aside the sale for good cause, or in case it shall become necessary to do so, in order to arrive at a proper rule of distribution, is reserved.

The Receiver to prepare an inventory of the rolling stock—distinguishing between such part as is owned exclusively by the Company and such as is owned in common with some other corporation or person—also a statement of the nature of the connexion between the said Company and the Hillsboro and Cincinnati Railroad Company, and as to the arrangement touching the bridge at Marietta, and other arrangements or contracts made by said Company which may by operation of law devolve on the purchaser of the road, and subject to which the sale shall be made, and shall keep said inventory in his office for inspection, etc.

The proceeds of the sale, and any funds in the Receiver's hands, to be held for distribution as follows:

First, to the payment of the costs of the suit, of the sale and the Receivership; liabilities incurred by the Receiver in operating the road, including demand for labor and supplies, and all demands which the Receiver was authorized to pay by the order of his appointment. A fund of \$30,000 was set apart for operatives and others having claims accruing prior to the Receiver's appointment—and the question of a future allowance was left open to be considered by the Court hereafter. All taxes against the Company to be fully paid.

Second, the residue of the proceeds of sale are to be deposited by the Receiver subject to the future order of the Court as to its safe keeping and final distribution.

The Receiver is required to give notice by publication for four months, in newspapers in Chillicothe, Cincinnati, and New York, to all bondholders and other creditors to file their bonds or claims with him, on or before the first Monday of June next.

The Receiver is also required to file with the Court, by the next term, a schedule of all property of the Company not embraced in the order of sale.

He is to deposit the money, bonds or negotiable evidences of debt which may come to his hands, in the Ross County Bank for safe keeping, subject to the control of the Court, and removable only by its order.

The Clerk is required to issue an order of sale to the Receiver, returnable at next term, to which time the cause is continued—*Cin. Commercial*.

IMPROVEMENT.—The *Railway Times* came to us last week in a new form, and otherwise greatly improved in its personal appearance. The *Times* is a good paper, and we are pleased to see such evidences of prosperity.

PITTSBURG, FT. WAYNE & CHICAGO RAILROAD.

This road which has recently passed through a severe ordeal is once more on its legs, with the prospect of a bright future before it, with confidence in its financial management strengthened, and any doubts as to its ability to maintain its position as one of the most important and attractive routes through to the East removed. The appointment of the Hon. Wm. B. Ogden, Receiver, whose through business energy and acumen is only equalled by his unimpeachable honor and integrity, seems to have soothed at once all elements of discord and disturbance, while a few hours plain talk from Mr. Thomson with the bondholders East readily satisfied them as to the honest directness of his intentions so far as Pennsylvania Central influences were concerned. The general impression seems to be that an unnecessary disturbance and fuss has been made with no definite idea of the mutual dependence and identity of interests of controlling parties and creditors, and that forbearance of right expected by its truest friends to a road as yet, comparatively speaking, in its infancy. The reign of order has been at last restored, and the current of its daily business flows again, steadily and uninterruptedly. The laborers and mechanics at the workshops no longer feel appalled at the prospect of "short commons" for their families at the dead of winter. Conductors, baggage and train men no longer fret themselves into a fever of anxious solicitude for Barnes, the good-natured Paymaster, has been here, there and everywhere the past week, dropping the blessed manna of meat and drink in his wake, or its equivalent in hard cash, distributing something better than "good tidings" to expectant homesteads.

The meanness of all tricks a railroad can descend to, when in a tight pinch—the indefinite postponement or repudiation in toto of the claims of its hard working employees—this road has not been guilty of. On the contrary, when its funds were so completely locked up by the first sudden Receivership sprung upon the road, the prime and principal effort was made for and in behalf of the working men of the road, and happily for those who relied for their daily bread upon the prompt payment of their wages, the application to the Court to pay these men their dues and the ordinary expenses of the road was granted. No doubt the derangement of the usual channels of its business, the abrupt dislocation of its affairs, the distrust inspired by the exaggerated rumors of its liability to default, collapse like Lowe's balloon, or become hopelessly snagged in the tedious meshes of litigation, inflicted a temporary injury upon this road which can be computed only by thousands of dollars. But give the institution a little headway again and she will inevitably right up. Thanks to the prompt action taken by its truest friends at the threshold of difficulty, the popularity of the road has not been lessened in public estimation, while outsiders and insiders feel satisfied that under the wise and prudent pilotage of such men as Messrs. Cass, Ogden and Thomson, there can exist no real or lasting cause for apprehension or alarm. Receiverships have been the prevailing fashion of late with many much older Western roads, and we believe if all come out of the fiery furnace as desecently unscathed as the Ft. Wayne and Pittsburgh, they may truly felicitate themselves that no living part has been injured or their vitality seriously compromised.

Meanwhile, passengers, grain, produce of

all kinds, flour, corn, live stock and dead stock, seeking prompt exportation to Pittsburgh, Cleveland, Cincinnati, Philadelphia, New York and other eastern markets by the shortest and best route have only to make his, her, its or their wants known at the proper ticket or freight offices of the Pittsburgh, Fort Wayne and Chicago Railroad to be satisfactorily disposed of. Mountainous labor has not in this instance even produced a mouse, but we understand several bull fleas have been detected in the ears of would be disturbers of the peace of this—the public's great highway to the city of peaceful Quakerdom and that glowing and glorious, busy, bustling, lively, bewitching *Gomarrh* of America yeleft New York.—*Western R. R. Gazette*.

TENSILE STRENGTH OF IRON.

One of our best Pennsylvania iron manufacturers has recently concluded some very interesting experiments on the tensile and transverse strength of various descriptions of iron, with the following results:

The samples treated are generally of the pig iron sent to market, or of mixtures with it, course represent a second fusion. These experiments were made with one of the instruments designed by Major Wade of the army, who conducted experiments on materials for ordnance work for many years, at the various government foundries, the results of which were published in 1855 by the ordnance bureau, in a fine quarto volume. These experiments were on iron used for ordnance alone, however, and the need greatly to be extended to all varieties of iron produced in Pennsylvania. Major Wade shows that very great improvements were effected by the system, and the attention to qualities and modes of making, he did so much to introduce, the result being that cannon cast subsequent to 1851, had an average strength nearly twice as great as those cast previous to 1841. We would be glad to see experiments of this sort made constantly upon all the quantities of iron seeking a market here, and it is clear, from what has already been done, that they may be easily and accurately made. Such as we have are quite as good as those which make up the valuable volume published by the government.

The mode of testing the strength of iron is compactly stated in the record of the experiments, from which we transcribe it.

"For the transverse strength are cast three bars, each 23 inches long, and about two inches square. These when placed in the machine are caught in the middle by a knife-edge of a movable stirrup, while the upper side of the ends are drawn up against two fixed knife edges, 20 inches apart. When broken, the dimensions of the bar at the fracture are accurately measured, the measure parallel to the knife edges being considered as the breadth, and that perpendicular to them as the depth.

"The unit of the transverse strength represents the weight required to break a bar of the same material one inch square, supported horizontally at one end, the weight being applied at one inch from the point of support.

"For the tensile strength three solid cylindrical pieces are cast, and then turned so as to be about three inches in length, with the smallest diameter (such as to equal in area about one square inch) in the middle. The ends are turned so as to be securely clamped in the hangers of the machine, and the test is then made by pulling the specimen apart by a perpendicular strain. The diameter at the fracture is accurately measured, and this, with

the amount of force actually applied to break the specimen, constitutes the data from which the force required to break a bar of this metal, in this manner, of exactly one inch square, is calculated by the following formula: $S = W$ divided by *area*; *S* being the force required to break a bar of one square inch, designated in pounds; *W* the number of pounds or breaking force actually applied, and the *area* that of the cylinder at the point of fracture."

These experiments have been continued over a period of several years, or from 1850 to the present time, and they represent many varieties of pig iron produced in the State and known in this market. For the average of sixty-three trials first made of tensile strength on about twenty varieties of pig iron, the breaking force was 16,663 pounds to the square inch. The extremes for single experiments were 20,000 pounds and 13,000 pounds, and excluding seven or eight experiments on iron which gave a generally high degree of strength, though exceptionally low in some numbers or cases, the average of fifty-five trials is 17,200 pounds which probably represents the average of the best qualities of anthracite iron made in 1850 and 1851. The names of the varieties are Menox, Marengo, Shickashinny, Balliet, Swatara, Marietta, Locust Grove, Grey Bush, Oxford, Potts & Co., Alleghany and Conowingo.—No very decided preference is apparent among these as to tensile strength. A variety of Kentucky iron experimented on at the same time gave nearly the same strength, and "cold blast Clymer," and "Elba" iron gave the same result substantially. A sample of Elba iron made in 1852 gave nearly 20,000 pounds tensile strength for two trials. A sample of No. 2, "Franklin hot blast and hematite ore," made in June 1853, gave an average tensile strength of 21,500 pounds to the square inch; three trials of Mt. Vernon iron of the same date gave nearly the same strength. Lewis-town hot blast anthracite, of August, 1853, gave for four trials a strength of 18,000 pounds. A sample of "Marietta" iron made in January, 1856, had a tensile strength of 23,500 pounds, and a mixture of this with "White Bush," in equal parts, of 22,850 pounds.

The trials of 1854 show a decided increase of strength in the various qualities. A trial of "Grey Paxinos" had a strength of 21,000 pounds to the inch; mixtures of Octorara and "Elba," and "Wawayanda and Elba," had a strength of 26,000 to 24,000 pounds. In 1855, the average of the trials was about 21,000 pounds, on "Moselem" and "Rough and Ready" iron mainly. In 1856, "Grey Rough and Ready" had a strength 23,500 pounds, on the average; "Grey Bush" of 19,000, and "Grey Swatara" of 18,000 pounds. A sample of common hot blast anthracite from "Moselem" furnace in 1859, has a strength of 18,000 pounds for an average of three trials. Two or three other varieties had an average of about 17,000 pounds, including a cold blast charcoal iron from Baltimore—the "Columbia." The term "Grey," quoted from the record, is not a part of the name of the furnace or specific variety of iron, but it means only that all the iron is soft grey.

In 1847 some very superior cold blast anthracite iron was tested—"Moselem" made in January, and a mixture of this with "White Wawayanda" had an average strength of 24,300 pounds, for nine trials. "Grey Catherine," from Baltimore had a strength of 18,600 pounds, and "Grey Liberty," from Virginia, of 16,100 pounds only. "Grey cold blast anthracite Moselem" of April, 1857, mixed with four tenths of "White Wm. Penn," gave the high-

est strength attained, of 32,000 pounds the square inch for the mean of their trials.

Much of the experiments of 1857 was for special purposes, and test pieces for strength alone were not prepared. In some instances cold blast charcoal broke as low as 13,000 pounds, and cold blast anthracite "Moselem" went as high as 22,500 pounds. Cold blast charcoal iron from Sterlingville, New York, had an average strength of 14,500 pounds; grey charcoal from Crown Point New York, had an average of 18,000 pounds. Grey cold blast anthracite Moselem of October, 1857, averaged 23,100 pounds to the square inch, which was the latest test, except a sample of "Grey Capon" in January of the present year, at a little less than 20,000 pounds.

These experiments, it should be remarked do not furnish accurate tests of the value of the several varieties of iron, because they are not of uniform temper as received from the makers. Some soft irons break at less strength than would be indicated by their order, and it is necessary to make a mixture, and attain a "mottle temper, to test the value accurately.

The results exhibit a rapid improvement in the quality of anthracite iron, and a final average of strength attained, which is much above any recorded strength of pig iron from other quarters, whether charcoal or other, if we except the Highland region of New York and vicinity. Wrought iron which possessed great strength, was tested in 1851. "Red Short Duncannon" had a strength of 73,000 pounds to the square inch, and another variety of "cold short iron" from the same quarter 70,500 pounds. A sample of wrought iron from Lake Superior ores had a strength of 52,500 pounds to the square inch. A sample of "Greenwood" iron had a strength of 37,500 pounds for three trials; the same number of trials of a mixture of "Alleghany and Greenwood" gave a strength of 38,500 pounds, the samples being taken from a gun barrel. Other samples of wrought iron for roof bars, made in the city, had an average strength of 66,000, ranging from 62,500 to 72,000.

The test of *transverse strength* gave more variable results, but the average of pig cast iron, was more than one third of the tensile strength. The average for perfect samples was from 7,000 to 7,500 pounds for the principal varieties averaging 17,00 pounds tensile strength. None went so high as 9,000 pounds to the square inch, and no sound bars fell below 5,000 pounds. Experiments of this character were not continued after 1852.—*Mining Chronicle*.

MONETARY AND COMMERCIAL.

Since our last there has been but little change in money matters, the indications, however, are in favor of an improvement, the supply of currency being a shade better than a week ago. Rates of discount are the same as heretofore quoted, and are governed by the wants of the borrower and the opportunities of the lender.

Eastern Exchange is a trifle easier than for a few days past, but rates are without change. Dealers pay from $\frac{1}{2}$ to $\frac{3}{4}$ for New York, and sell at $\frac{1}{2}$. We quote:

	BUYING.	SELLING.
New York Sight.....	5@62 prem.	1@1 prem.
Boston.....	45@53 prem.	1@1 prem.
Philadelphia.....	50@62 prem.	1@1 prem.
Baltimore.....	45@53 prem.	1@1 prem.
New Orleans.....	50@55 prem.	1 prem.
American Gold.....	50@55	1@1 prem.

The Banks of Pennsylvania show the following figures for the principal items in their yearly official report, made up to the 1st of November last:

Loans.....	\$48,253,292
Specie.....	8,378,474
Circulation.....	13,132,892
Deposits.....	25,706,645

The New York Post gives the following as "an official statement of the aggregate trade of this country with foreign nations for the last year, showing: Great Britain—Imports, \$125,000,000; exports, \$175,000,000. France—Imports, \$41,000,000; exports, \$44,000,000. East and West Indies, Brazil, China and Venezuela—Imports, \$95,-

000,000; exports, \$35,000,000. Other countries—Imports, \$76,000,000; exports, \$122,000,000."

The debt of the State of Pennsylvania is as follows:

Funded debt, viz:	
6 per cent loans.....	\$400,630 00
5 per cent loans.....	37,625,153 37
4 per cent loans.....	388,200 00
4 per cent loans.....	100,000 00
	\$38,513,983 37
Unfunded Debt, viz:	
Relief Notes in Circulation....	101 213 00
Interest certificates outstanding.	18,513 33
Interest certificates unclaimed.	4,448 38
Domestic creditors.....	802 50
	124,977 70

Total State Debt, Dec. 1, 1859.....\$38,638,961 07
The loans over due, as well as these becoming due, were:

Amount over due.....	\$18,166,103 90
Amount reimbursable in the year 1860.....	2,372,601 87
" " " " 1861.....	79,900 00
" " " " 1862.....	1,945,773 78
" " " " 1863.....	168,200 00
" " " " 1864.....	2,981,450 43
" " " " 1865.....	1,611,068 55
" " " " 1866.....	2,367,725 59
" " " " 1867.....	1,786,342 87
" " " " 1868.....	4,869,000 00
" " " " 1869.....	438,000 00
" " " " 1870.....	400,000 00
" " " " 1871.....	550,000 00
" of bank charter loans.....	386,330 60
" of relief notes in circulation.....	101,213 00

Total.....\$38,633,710 19
The assessable value of the real and personal property is \$568,770,234.

MEMPHIS AND CHARLESTON RAILROAD.—The following table will exhibit the receipts and expenses of the Memphis and Charleston Railroad, for the month of December, 1859:

From Passengers.....	\$93,312 13
" Freight.....	60,974 79
" Mails.....	4,597 91
" Express, etc.....	1,791 56
Total receipts.....	160,707 49
Total expenses.....	13,191 85

Net earnings.....97,515 64

The number of bales of Cotton brought to the city was.....30,283

Condition of the Rhode Island Banks as compared with the statement of Dec. 5, are as follows:

	Providence Banks.	Country Banks.
Capital.....	\$48,400 00 inc.	\$3,000 00 inc.
Circulation.....	63,537 00 dec.	13,037 00 dec.
Deposits.....	49,693 15 inc.	24,439 28 inc.
Due Banks.....	51,502 33 dec.	6,732 53 dec.
Loans.....	57,239 69 inc.	8,935 33 inc.
Specie.....	12,664 47 dec.	5,993 76 dec.
Bank notes.....	40,902 04 dec.	29,218 59 dec.
Due by Banks.....	72,264 58 inc.	33,841 50 inc.

Annexed is the statement of the Boston Banks for the last two weeks:

	Jan. 2, 1859.	Jan. 3, 1860.	Jan. 10, 1860.
Loans.....	\$59,807 556	\$60,010,968	\$60,319,955
Specie.....	4,674,271	4,516,579	8,295,302
Deposits.....	13,449,305	18,269,072	21,615,488
Circulation.....	6,543,134	7,088,095	7,016,104

The week ending on the 9th inst., as compared with the preceding one, exhibits an increase of \$253,892 in the item of loans and discounts, \$409,212 in circulation, and a decrease of \$157,692 in specie, and \$10,226 in deposits.

A comparison of the footings of the monthly statement of the Banks of Massachusetts, out of Boston, with those of the statements for the previous month, exhibits the following changes, viz:

	Increase.	Decrease.
Loans and discounts.....		\$132,940
Specie in bank.....		63,322
Balance in other banks payable on demand.....		339,946
Due from other banks.....		452,602
Due to other banks.....		79,419
Deposits.....		374,550
Circulation.....		712 481

The debt of the State of New York is as follows:

General Fund debt.....	\$1,505,654 37	Annual Int. \$354,606 10
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CANAL DEBT.

No. 1, under Art. 7, Sec. 1, of Constitution.....	\$11,665,098 99	614,263 04
No. 2, under Art. 7, Sec. 3, of Constitution.....	12,000,000 00	710,000 00
No. 3, under Art. 7, Sec. 10, of Constitution.....	642,585 49	34,629 23
No. 4, under Art. 7, to pay floating debt.....	2,500,000 00	150,000 00
Contingent debt.....	570,000 00	

Total debt.....\$33,883,368 85
The gross revenues of the canals for the last fiscal year were.....\$1,859,879 63
Expense of repairs, collection, &c.....897,878 96

Surplus revenues.....\$962,000 67

LOGANSFORT & BURLINGTON R. R.

It will be a gratification to every citizen of our city and county to know that this great work is completed, and that Peoria, Illinois, and Burlington, Iowa, are as accessible to our people as Toledo or Cincinnati. The first train, consisting of a locomotive and a freight and passenger car—the latter well filled with citizens who had been invited to participate in the excursion—left Bridge street at 11½ A. M., on Monday, December 26. After a run of an hour, during which the town of Burnettsville was passed twelve miles West, the train crossed the Tippacanoe river at Monticello, over a fine bridge at an elevation of seventy-three feet from the bed of the stream. At Reynolds—the crossing of the New Albany and Chicago Railroad—a difficulty occurred which detained the train from one until seven o'clock. A boarding house on trucks, occupied by a number of laborers, was found on the track, and rails taken up each side of it. A writ, served by the Sheriff of White county, with the aid of a posse, removed the obstruction after a trifling melee in which there was little injury done to the combatants on either side—although the deeds of valor performed (each participant being permitted to recount his hair breadth escapes and feats of arms,) rival the exploits of many a bloodless field. At seven o'clock the train was again rapidly moving westward over the boundless prairies. After a run of two hours the train "hove to" in a snow drift several feet deep and hundreds of feet in length. After active exercise for two hours in clearing the track, the train was again in motion about 11 o'clock. Several smaller snow drifts afforded delightful exercise before the State Line was reached, at which point three hearty cheers were given in honor of the occasion. Reaching Gilman, (the junction with the Chicago Branch of the Illinois Central, 87 miles from Logansport,) a delay of two hours occurred waiting for a freight train. Our train arrived at Chenoa (the junction of the St. Louis, Alton and Chicago Railroad, 48 miles from Peoria,) at 7½ o'clock, and the passengers partook of an excellent breakfast provided at the expense of Messrs. Gilman and Cruger. Leaving this point at 9 A. M., the train passed Elpeso, (the junction of the Illinois Central) Secor, Eureka, Cruger and Washington, and reached Peoria at eleven o'clock on Tuesday morning, and found at the Peoria House excellent accommodations.

The arrival of the train was the occasion of rejoicing on the part of the citizens of Peoria, evidenced by their whole hearted hospitality; and it is but an expression of the unanimous feeling of the excursionists to thank them for their kindness.

In the afternoon the extensive manufacturing establishments were visited by our citizens. At the residence of Thomas G. McCulloch, Esq., formerly a citizen of this place, a pleasant evening was passed.

Peoria must be seen to be appreciated. The location is fine, business active, and the growth of the place from 1849 to the present time is stated at about seventeen thousand. The population of the city is estimated at twenty-two thousand. In size, business, and prosperity, Peoria ranks as the second city in the State of Illinois. The promise of intimate business relations between Logansport and Peoria will make our citizens better acquainted with that beautiful city, and it is hoped that its thrift and enterprise will give our city an impetus which will result in the improvement of the natural advantages it possesses.

At 11 on Wednesday our citizens left Peoria, pleased with it, and the generous hospitality of its citizens. A rapid run over the magnificent prairies, bounded only by the horizon, brought us at three o'clock to Gilman, where a bountiful dinner was ordered by Messrs. Gilman and Cruger for the excursionists.

The run from Gilman to this place was made without detention or accident, and at half past eight P. M. our citizens left the train at Bridge street, pleased with the trip, and gratified with the courtesy manifested by Mr. Gilman, one of the Lessees, and Mr. Cruger, the Superintendent of the road from this city to Burlington.

It would not be doing justice to close this notice of the opening of this important railroad route, without saying that to Messrs. Wm. Chase and D. M. Dunn, of this city, honor for the success of this enterprise is due. Williamson Wright, Esq., of this city, and Mr. Benjamin Reynolds, of Monticello, rendered valuable aid in forming the connection with the Peorio and Burlington Railroad, which secured the completion of the enterprise celebrated by the excursion trip. The 61½ miles in Indiana have been built under the direction of Mr. L. S. Nash, Chief Engineer. It is sufficient to say that the work has been done in a shorter time than any other line of road of the same length on record.

The re-location of the line was commenced on 28th day of April last, but was not completed when the work was mostly put under contract on the 16th of May. The track was connected on the 25th Dec., just 7 months and 9 days from the time the contracts were executed.

Since time of commencement, the following is an outline of the work done:

Three truss How bridges, of the aggregate length of 1343 feet—one 907 feet long over Tippacanoe river, being 73 feet above the bed of the river.

There are three structures of trestle work, of the aggregate length of 4,050 feet—one 850 feet long and 47 feet high, at Crooked Creek. The three contain 790,000 feet board measure, of timber.

In the construction of the road during the seven months there have been excavated 675,000 cubic yards of earth; 13,800 cubic yards of rock; 2,232 cubic yards of masonry have been laid up, and 1,255,000 feet, board measure, of timber and lumber have been procured, hewn, framed and raised into trestle work, culverts, cattle guards and other structures, besides the timber piers and abutments at Tippiacanoe river; and from 160,000 to 170,000 cross ties have been delivered;—all of which timber, including that of which the How bridges were built, was growing in the woods on the 1st of June.

Regular passenger and freight trains will be placed on the road next Monday. W. H. Cruger, Esq., is Superintendent of the road, and his energy and business talent guarantee the prompt and faithful transaction of all business connected with it.—*Democratic Pharos.*

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned
THEODORE DEHON,
no13 10 Wal. ar Broadway, New York

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
No. 67 West 6th St. bet Walnut & Vine
CINCINNATI O

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANA OR SANDOVAL

FOR

Decatur, Springfield,
Bloomington, Peoria,
Burlington, Quincy,
La Salle, Rock Island,
Dixon, Galena,
Prairie du Chien, St. Paul, and
St. Anthony,
And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANA for all the above points. Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via

PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line
FIRST CLASS STEAMERS

Running in Direct connection with this Road for all
TOWNS ON THE UPPER MISSISSIPPI

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,
Gen'l Southern Agent, Cincinnati.
W. P. JOHNSON,
Gen'l Passenger Agent, Chicago.

Winter Arrangement, 1859-'60.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the

West, South-West and North-West.

TWO TRAINS

Leave Wheeling daily at 12:35 P. M., and 10:10 P. M.

One Train leaves Parkersburg daily at 9:20 P. M.

Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.

Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2.

Time as quick and Fare as low as by any other ROUTE.

Inquire for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

E. F. FULLER,
General Western Agent
L. M. COLE,
General Ticket Agent.
W. P. SMITH, Master Transportation.

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circular which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the retort is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet,.....	\$300 00
do do do 350 " " " " " " " " " " " "	335 00
do do do 400 " " " " " " " " " " " "	375 00
do do do 500 " " " " " " " " " " " "	450 00
do do do 600 " " " " " " " " " " " "	525 00
do do do 700 " " " " " " " " " " " "	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 7 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, as now in operation in several States, apply to

R. T. COVERDALE,

167 Walnut Street, Cincinnati, Ohio, who has the exclusive right to manufacture and sell in the State of Ohio.

Feb. 24th, 1859.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Booksellers, Country merchants, and others to our varied and extensive stock of School, Classical, Theological, Standard, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the principal publishers and manufacturers of Paper and Stationery, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

BOOKSELLERS,

Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, and Tea wrap-boards, Envelopes, Penholders, Copying Books, Ink and saucers, Sealing Slates, Mucilage, Book rests, Bill Envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files; Date Calendars, together with all other articles used in the counting-house.

Stationers,

To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly paged, including all sizes, from the small memorandum book to the large Super Royal Ledger, and a variety of styles of workmanship, order of any design, with or without printed headings, and warranted in quality of paper, ruling and durability of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

BLANK BOOK MANUFACTURERS,

We are prepared to Print and Bind books in any style desired, at rates as low as quality of work cut in this where. Our executing these branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Cards, Circulars, or other printing, will that we do such orders despatch. Orders re-

Stereotype, of any description that may be desired, can be executed or else facilities for branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Cards, Circulars, or other printing, will that we do such orders despatch. Orders re-

Publishers

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, *Clarke's Commentaries*, *Dick's Works*, *Lin's Ancient History*, *Plutarch's Lives*, *Josephus*, *Spectator*, *Chain of Sacred Wonders*, *Familiar Science*, *Webb's Monitor*, *Soden's German*, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, Books of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

APPLEGATE & CO.,
Booksellers, Publishers, Stationers & Blank Book Manufacturers,
43 Main St. Cincinnati O.

43 MAIN STREET, CIN.

W. HARVEY'S SAFETY JOINT For Coupling the Ends of "T" Rail PATENTED, NOV. 2, 1858.

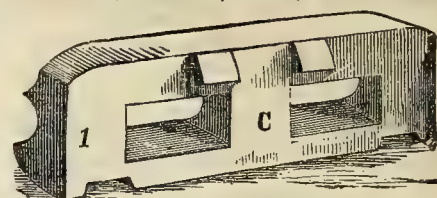


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

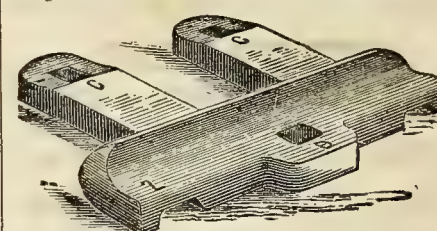
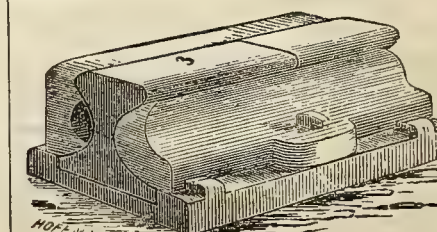


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that on one part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly safe road, thereby doing away with the breaking of rails, wheels, and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear of the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
41 Jefferson street, Albany, N. Y.

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

SOLE IMPORTERS
PROSSER'S PATENT SURFACE CON-
DENSERS for high pressure steam, with sea or
other bad boiler water, gauges, 3-cutter drills, counter-
sinks, tube end cutting bars, expanders, tube scalers,
steel wire and whalebone brushes, pull lever wrenches,
tubes—plain or enameled, screwed together for Artesian
Wells, Hollow Slabs for various purposes, Steel for
Rollers.
THOS. PROSSER & SON,
28 Platt Street, New York.

W. G. LOBDELL. H. S. M'COMBES. D. P. BUSH.

BUSH & LOBDELL, Wilmington - - - - - Delaware MANUFACTURERS OF

CHILLED WHEELS

AND TIRES,

For R. R. Cars & Locomotive Engines,
ARE PREPARED TO

Execute Promptly Orders to any Extent
FOR THEIR
CELEBRATED WHEELS,
EITHER SINGLE OR DOUBLE PLATE,
WITH OR WITHOUT AXLES

WHEELS FITTED
To Hammered or Rolled Axles,
In the best manner, at the shortest notice, and on the
Most Reasonable Terms.

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—THE— POST-OFFICE GUIDE! For Post-Masters and Business Men.

CONTAINING
A Complete List of Post-Offices in the United States
and Territories, arranged by States and Counties; A
Complete List of all Distributing Post-Offices; Rates
of Foreign and Domestic Letter Postage; Rates of
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partment, &c., &c.

COMPILED BY E. PENROSE JONES,
Late Assistant Post-Master at Cincinnati.
Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.
U. S. BLANK AGENCY, CINCINNATI POST-OFFICE,
January, 1859.

This work has been carefully compiled and corrected by
E. PENROSE JONES, Esq., late Assistant Post-Master of the
Cincinnati P. O., from the Records in this Department, and
other sources, and contains the most complete list of Post-
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Agent and Inspector of Blanks, &c., for P. O. Depart.

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SEWING MACHINES.

WM. SUMNER & CO., cor. Fourth and Wal-
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BRANCH OFFICES:

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Lafayette, Ind., Dayton, O.,
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important improvements, at a reduction on former prices;
and to meet the demand for a GOOD, LOW-PRICED FAMILY
MACHINE, have introduced a new style, working upon the
same principle, and making the same stitch, though not so
highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALIVE ON
BOTH SIDES, impossible to ravel, and leaving no chain or
ridge on the under side, the economy of thread, and adap-
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the most successful and popular Family Sewing Machine
now made.

At our various offices we sell at New York prices, and
give instructions, free of charge, to enable purchasers to
sew ordinary seams, hem, fell, quilt, gather, bind, and
tuck, all on the same machine, and warrant it for three
years.

Send or call for a circular, containing all particu-
lars, prices, testimonials, &c.

WM. SUMNER & CO.
1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th
Corby, Gossin & Co.'s make, for sale very
low by
TRABER & AUBERY,
7 Public Landing

GEO. D. WINCHELL & BRO.,

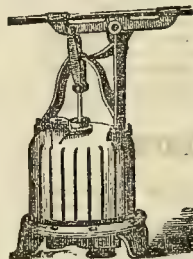
172 Elm Street, bet. 4th and 5th,
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine.



WOULD respectfully invite
the attention of RAILROAD
Companies, Manufacturer
Distillers, Miners, and the pub-
lic generally to these Pumps,
as the best Pump now in use,
and acknowledged by all who
have used them to be perfect—
are simple in their construc-
tion, compact, durable and not
likely to get out of order; well
adapted for Steamboats, Rail-
road Water Stations, Distille-
ries, Breweries, Furnaces,
Mines, Rolling Mills, Paper
Mills, Factories, Wells, Cla-
rene, Stationary Fire Engines, Garden Engines and for
all purposes where a Pump can be used. Also, for
forcing a large body of water to a great height or distance
rapidly.

Also, McGowan's Patent Ball Valve Pump, designed
for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings
Lead, Copper and Gas Pipe furnished at the westma-
kel prices.

Full and perfect satisfaction guaranteed in all cases,
when properly put up according to directions.
Orders thankfully received and promptly filled at the
shortest notice.

SILVER MEDAL. (The highest prize) awarded
for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings
Lead, Copper and Gas Pipe furnished at the westma-
kel prices.
Ohio Mechanics' Institute June 18, 1855—1

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co.,
Pennsylvania, are prepared to execute orders for Street and
other Rails on terms favorable to parties wanting to pur-
chase
Ag. 4, m. 6.

FREEDOM IRON COMPANY,

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods,

Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't.

This Iron is all made from best Juniata cold-blast char-
coal Pig Iron, refined with Charcoal in the old-fashioned
Forge Fire, hammered into a Bloom from which Iron is
hammered. The whole operation from ore to finished Iron
is conducted at our own Works
June 9.

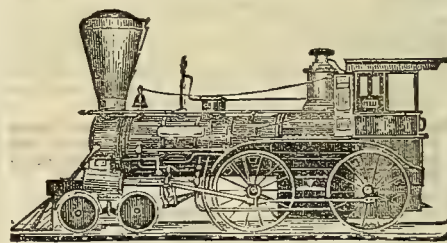
New Time Table

OF THE

NEW YORK CENTRAL R. R.

	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp.	7 00 A. M.	7 00 P. M.	7 00 P. M.
Mail	9 00 A. M.	12 50 A. M.	
New York Exp.	11 15 A. M.	9 00 P. M.	9 00 P. M.
Night Exp.	5 00 P. M.	4 00 P. M.	4 00 A. M.
Utica Accom.	6 00 P. M.	Ar. U. 10 00 P. M.	
N. Y. Mail	11 15 P. M.	10 00 A. M.	10 00 A. M.
	Leave Buffalo.	Leave Bridge.	Ar. Albany
New York Exp.	5 15 A. M.	5 15 A. M.	3 30 P. M.
Steamboat Exp.	8 30 A. M.	8 00 A. M.	8 00 P. M.
Mail			2 30 P. M.
Cleveland Exp.	6 20 P. M.	6 00 P. M.	4 40 A. M.
Cincinnati Exp.	11 00 P. M.	11 00 P. M.	8 30 A. M.
Utica Accom.			10 00 A. M.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive
equal in efficiency and durability to the best Eastern
manufacture. Also, Shaping and Slotting Machines
suitable for railroad shops. Also, all kinds of heavy
forging and casting done at short notice. Also, bolts for
bridges cut with dispatch.
a 20
MOORE & RICHARDSON.

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State, is under the superintendence of Col. E. W.
MORGAN, a distinguished graduate of West Point
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Geology; also in English Literature, Historical Read-
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P. DUDLEY,
President of the Board

Jan.

The Railroad Record.

E. D. MANSFIELD, { Editors.
T. WRIGHTSON.

CINCINNATI:

Thursday Morning, Jan. 26. 1860.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

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A square is the space occupied by ten lines of Nonpareil.
One square, single insertion,..... \$1 00
" " per month,..... 3 00
" " six months,..... 12 00
" " per annum,..... 20 00
" column, single insertion,..... 5 00
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THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

The European Agents for the *Railroad Record* are Messrs. FREDERIC ALGAR of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

FORT WAYNE REPUBLICAN.—On the first of January 1860, the Fort Wayne Republican published the business statistics of that city for 1859, from which the following facts and figures are compiled, and which are now presented to merchants and business men in other cities, to enable them to form a correct estimate of the commercial importance of the place.

The assessed value of property in 1842 was.....	\$424,186
In 1850, the population was.....	4,282
And the total assessed value of property was.....	\$891,912
On the first of January 1859 the assessed value of property was.....	\$2,027,805
And the estimated population now is.....	14,000
The amount of flour, manufactured the past year was.....	60,000 barrels,
The average yearly amount of wheat shipped, is.....	459,000 bush.
The number of dressed hogs, shipped in 1859, was.....	20,700 head,
The Pots and Pearls shipped in 1859, was.....	500 tons.
The Butter shipped in 1859, amounted to.....	344,000 lbs.
The Eggs shipped in 1859, amounted to.....	1,000 barrels,
The Wool shipped in 1859, amounted to.....	178,000 lbs.
The Furs collected and shipped, were worth.....	\$80,000
The Drugs sold in the city, amounted to.....	\$112,000
The Clothing manufactured and sold was worth.....	\$200,000
The Boots and Shoes manufactured and sold was worth.....	\$225,000
he Hides shipped numbered.....	6,000
The Sheep, Peltries.....	7,090
The Groceries and Dry Goods sold amounted to.....	\$890,000
The Hardware and Stoves sold amounted to.....	\$150,000
The Furniture sold amounted to.....	\$35,000

PETER B. BAILEY, is the Editor and Publisher, to whom all communications should be addressed. Our Merchants will do well to examine into Mr. Bailey's claims to a share of their advertising patronage.

SOCIAL STATISTICS—EFFECTS OF A FINANCIAL CRISIS.

In the Report of the Commissioner of Statistics to the Legislature of Ohio, made a few days since are some curious facts, bearing on the effects of the late financial crisis. It is well known, that the revulsion, although producing disastrous effects in many quarters, produced comparatively little in Ohio, yet that little was enough to produce much damage. The town speculations, building, and new enterprises were all set back. Manufactures languished, and in one word, *enterprise* (the term commonly used to express progress or action) was compelled to come to a stand. Not much positive mischief, and but few failures occurred. Yet there was a general cessation of new schemes. This negation of active movement has shown itself in the statistics of the State exactly, where we should expect to see, if we reasoned correctly. We must here remark, however, that it is not immediately after a crisis, the greatest effects are seen, but, when after a struggle, and an effort at settlements, the financial results are exhibited. Thus it is that the statistics of 1859 show more than those of 1858, the consequence of the revulsion. Among the general facts stated by the Commissioner, are these:

1st. An increase in the amount of judgments obtained in the Courts.

2d. A reduction in the number of new structures, or buildings erected.

3d. A reduction in the value of town property.

4th. A reduction in the number of marriages.

5th. An increase of pauperism.

The difference in these (except in town property which is larger) are not very great, but they all tend in one way, and are evidently derived from one cause.

1st. The increase in the amount of Civil Judgments is considerable, and was naturally to be looked for. The crisis of 1847, occurred late in the season. It must take some months in most cases, to make it certain that legal remedies must be resorted to, and then some time more to get judgment. The judgments of 1859 are an increase of 20 per cent on those of 1858.

2d. The number of *new buildings* in 1859, were 9,200, in 1858, 10,400, the number was at least 1,200 less. It was generally supposed that in Cincinnati, there was much more building than in previous years. This was not so. The number of buildings was about the same, the cost was greater, but there was no more room for increased population, in the new building than in the year previous. New buildings are a very good indication of the increase of population. If all of 1,000 buildings were dwellings they would average eight persons to a building, but one-third of these new build-

ings are stores, factories, and barns. It is ascertained, that taking them all together, the average of people to building is 6½. Thus then, the erection of 9,000 new buildings indicate a provision for 58,500 additional inhabitants, 10,400 indicate 67,600 additional people. It is impossible say, whether in any one year, there have been so many added, but is certain that in a series of years, there must be this addition to the inhabitants, or these buildings never would have been built.

3d. One of the curious facts, is the almost uniform reduction, in the value of *town property*, in the last six years. We have already alluded to this fact. The Board of Equalization have saved some of the valuations of the appraisers but, on the whole left the *general fact*, as we have stated it, that *town property* has not increased in value during the last six years. Why? Obviously because the commercial crisis had its seat in towns, there the failures occurred, there credit was curtailed, and enterprise checked, the consequence was the towns no longer grew rapidly, and property there ceased to be so much in demand, and consequently fell in price.

4th. There has been a reduction in the number of marriages,—the Commissioner returns the number of marriages in Ohio, for the last three years, as follows:

In 1857.....	22,400
In 1858.....	22,250
In 1859.....	20,000

The falling off in 1859 is very decided. The proportion, however, is greater on an estimate of the population. The number of marriages, and the population, (as estimated) are as follows:

	Marriages.	Population.	Ratio.
In 1857.....	22,400	2,380,000	1 in 106
In 1858.....	22,250	2,420,000	1 in 108
In 1859.....	20,000	2,475,000	1 in 123

There is here a very decided falling off in the number of marriages, and no cause can be assigned for it, but some social cause, which increases the prudence or diminishes the inclination to marriage. This social cause, undoubtedly, is found in the diminished activity of business. If the American people were as the body of Irish, without any expectation of accumulating property, a financial crisis would make no difference, but in fact, the body of American young men are too hopeful and prosperous, not to observe some prudence in marriage. Hence, when a commercial revulsion throws some out of employment and diminishes the income of others, they will delay marriage to a more favorable period. Another cause for diminished marriages will be found in the *luxury* of the times. This bears hardly upon all persons of moderate means, especially upon young men of small means. If a more prudent, and less fashionable mode of life is not hereafter adopted, marriages will decline and the moral of society loosened.

5th. The Commissioner reports about 3,000 more paupers in the the State, than in the year

previous. A part of this is temporary no doubt, but it shows quite clearly what has been the effect of a commercial revulsion.

CONNECTICUT RIVER RAILROAD.

We are indebted to an obliging friend for a copy of the Fifteenth Annual Report of the Board of Directors to the Stockholders of this Company; being for the year ending November 30, 1859:

INCOME.

From Passengers.....	\$121,884 00
" Freight.....	135,982 73
" Mails.....	7,319 80
" Express.....	4,200 00
" Rents.....	2,905 62
Total.....	\$171,592 15

OPERATING EXPENSES.

Road Repairs, including new iron..	\$39,284 69
Repairs on Bridges.....	608 64
" Buildings.....	1,763 85
" of Locomotives.....	7,770 82
" Tools and Machinery.....	521 30
" Passenger Cars.....	3,566 56
" Freight Cars.....	8,009 92
" Hand Cars.....	206 41
Stationery, Printing and Advertis'g	1,219 65
Gratuities and Damages.....	3,440 99
Removing snow and ice.....	1,804 59

Transportation Expenses, viz:

Services.....	\$14,534 02
Wood.....	16,432 17
Oil.....	1,720 84
Waste.....	624 00
Contingent.....	196 92

Station Expenses.....	33,497 95
General ".....	21,028 58
Miscellaneous Expenses.....	4,586 41
	5,547 54

Total operating Expenses..... \$133,367 00

Net Earnings of the year..... \$138,225 15

Against which have been charged the following items:

Interest.....	\$13,066 95
Rent of Ashuelot Railroad.....	30,000 00
Dividends of February 1, 1859, old and preferred.....	37,972 00
Dividends of August 1, 1859, old and preferred.....	44,390 00
	\$125,428 95

Leaving a surplus of.....	\$12,796 20
Add balance of Income Account November 30, 1858.....	71,868 26

And we have, applicable to future dividends, a surplus of..... \$84,664 46

This surplus has risen to its present amount from \$19,519 19, at which it stood in 1850.

It appears that the receipts for merchandise transportation have been greater than in any previous year, while the passenger receipts are below the average amount.

With returning activity in the great commercial and industrial pursuits of the country and the improvement of our own business, our expenses have necessarily increased. The total number of men employed is one hundred and eighty, or about five to each two miles. The number of miles run by all the trains exceeds by 18,000 that of the previous year.

The cost of operating and maintaining the road has reached about forty-nine per cent. of the gross receipts. This item was materially increased by reason of a freshet in the latter part of winter, which injured the Ashuelot Road and parts of the road between Holyoke and Northampton. The absolute damage by

this casualty did not probably exceed two thousand dollars, but in making repairs it was deemed advisable to raise and strengthen the injured embankments at a large additional cost, for better protection in future. After paying from net income the rent of Ashuelot Road, interest on debt, and eight per cent. dividend on the preferred stock, the residue is a fraction more than five per cent. on the common stock.

The repairs of roadway and equipment have equalled in amount the average annual requirement. About 27,000 cross-ties and 290 tons of new rails have been placed in the track, and some 3,400 partially worn bars have been taken up and repaired at a cost of 52½ cents per bar.

At the Machine Shop we have built three house freight cars and five platform cars, to replace the same number of old ones, besides rebuilding the bodies of five other house, and six other platform cars. No serious accident has befallen the machinery, but numerous small breakages, as of driving wheels, crank axles, and tire, have contributed to swell the cost of repairs in this department.

Some of the results deducible from our accounts may be thus stated:

Miles run by Passenger trains.....	104,878
" " Freight and other trains..	72,286

Total miles run by all trains..... 177,164

	Dol. C. M.
Gross earnings per mile of Road, including Ashuelot.....	\$3,621 23
Gross earnings per mile run.....	1 53
Maintenance of Way per mile run.....	24.8
Repairs of Locomotives per mile run.....	4.4
Repairs of Cars per mile run.....	6.6
Cost of Fuel consumed per mile run.....	9.3
Total operating Expenses per mile run.....	75
Net earnings per mile run.....	78
Per centage of expenses to earnings, 49 per cent.	
Cost of Wood per Cord delivered on the tender.....	3 85
Average miles run to Cord of Wood, by all trains.....	41.51
Average miles run to Pint of Oil, by all trains.....	24.88
Average receipts per Passenger carried one mile.....	3.32
Average receipts per Ton of Freight carried one mile.....	5.25

During the year, several parcels of land not required for the business of the Company, have been sold, and the avails thereof carried to the credit of surplus real estate account. An item of \$726, for an additional station house at Hatfield, rendered necessary by the increase of business at that station, has been carried to the debit of the same account, leaving a balance of \$6,040 87. This sum will be available hereafter for extending our business facilities, as may be found expedient, without taxing the current income.

In accordance with the votes of the stockholders at the last annual meeting, a mortgage has been placed upon the road to secure the Two Hundred and Fifty Thousand Dollars of Bonds previously authorized, and running twenty years from September 1st, 1858. Of these bonds, \$72,500 in amount were negotiated at par, and the proceeds used in retiring \$30,000 of the indebtedness of the Company to the Western Railroad Sinking Fund, and

the balance was applied to the liquidation of the floating debt. From the Treasurer's books it appears that the outstanding Notes and

Bonds of the Company are as follows:

Notes, Due July 1, 1860.....	\$5,000
" Jan. 1, 1861.....	5,000
	\$10,000
Bonds, Due May 1, 1862.....	25,000
" Nov. 1, 1862.....	80,000
" May 1, 1863.....	25,000
" Nov. 1, 1863.....	40,000
	170,000
Mortgage Bonds due Sept. 1, 1878.....	72,500
	\$252,500

No difficulty is apprehended in negotiating the balance of the Bonds whenever we need the money. They are not now offered for the reason that our principal creditors, (the commissioners of the Western Railroad Sinking Fund,) decline to receive the amount payable to them before its maturity, some three years hence. It will be recollected that for the payment of the Bonds a Sinking Fund is established, which is to receive, from the income of the road, an annual contribution of \$8,000, commencing in 1861.

Regular dividends of four cent on the Preferred Stock, and 2½ per cent. on the Common Stock, are payable on the first of February next. An extra dividend of 1½ per cent. will be paid at the same time to holders of the common stock. The money for this extra dividend will come from the sale of securities in which a portion of the earnings were temporarily invested in 1857.

The preference, established in 1850, on 3,075 shares of our Capital Stock then issued, upon which the holders have uniformly received dividends of four per cent. semi-annually, expires by its limitation in August of the present year. This will be equivalent to releasing the income account from an annual charge of \$6,150 extra interest. Our ten years' lease of the Ashuelot Railroad, at an annual rent of thirty thousand dollars, will also expire with the year 1860. In view of the early suspension of these two heavy drafts upon our treasury, we venture to congratulate the stockholders upon the prospect of a better income from their property in future.

By order of the Board.

D. L. HARRIS, President.

BALANCE SHEET FROM TREASURER'S LEDGER, NOVEMBER 30, 1859.

	Dr.	
Cost of Road and equipment..	\$1,801,943 80	
Ashuelot Railroad equipment.....	21,841 42	
		\$1,823,785 22
Materials on hand, as per Inventory, viz.:		
Mechanics' Stock.....	\$14,718 18	
Road Stock.....	4,962 03	
Wood.....	13,135 50	
Oil.....	224 27	
		33,039 98
Suspense Account.....		290 41
Ferry Stock and Real Estate.....		2,893 32
Paymaster.....		3,919 11
Post Office Department.....		6,103 87
Balances due from Individuals and Corporations.....		6,506 45
Investment, 350 shares, C. R. R. Stock....		16,287 65
Notes Receivable, including \$17,000 in notes made by W. R. R. Corporation.....		23,137 93
Balances due from Passenger and Freight Agents.....		19,543 76
Cash in hand and deposited in Banks.....		24,046 29
		\$1,959,549 92

Capital Stock paid in, viz.:	Cr.
For 12836 shares, old.....	\$1,283,600 00
" 3075 shares, preferred....	407,500 00
	\$1,591,100 00
Funded Debt, as follows:	
Notes, due July 1, 1860... \$5,000	
" Jan. 1, 1861... 5,000	
	10,000 00
Bonds, due May 1, 1862... 25,000	
" Nov. 1, 1862... 80,000	
" May 1, 1863... 25,000	
" Nov. 1, 1863... 40,000	
	170,000 00
Mortgage bonds due Sept. 1, 1878.	72,500 00
	252,500 00
Profit and Loss.....	84,664 48
Surplus Real Estate Account, sales.....	6,040 87
Expense Bills Payable.....	11,029 28
Balance due Individuals and Corporations..	13,401 65
Unclaimed Dividends.....	813 66
	\$1,959,549 92

SETH HUNT, Treasurer.

SOUTHERN PACIFIC RAILROAD.

When we think of the character of the country to be traversed by the Southern Pacific Railroad, the important connection to be made, the political effect which it is to have upon Mexico, and the advantage which must arise to our commercial interests, we can not do otherwise than feel a deep interest in the progress of this great national work; which to say the least, will do more to regenerate benighted Mexico, and develop her immense resources, than anything which has ever been brought to bear upon that nation. Whatever benefits Mexico must also redound to our interests.

In no country upon the face of the earth has nature been more prodigal in her gifts of blessings, and resources of wealth. With a climate unrivaled for salubrity, with a soil fruitful in all the productions of the vegetable kingdom, with rivers romantic and picturesque, teeming with rare and choice fish, and hills bursting with the richest ores, of the mineral world, why should Mexico not be the home of intelligence, virtue and national greatness? It certainly is not because her climate is sickly, for except in some of the southeastern seaport towns, this is not true; it is not because the soil is impoverished, for her table lands are superior to any on the continent; not because her territory is bare of grass and timber, for both are of the most superior kind. No, not from any of these causes comes the backwardness of Mexican progress. Her non-intercourse policy must be broken into, and if she will not develop her resources we must assist her, for we are yet to become the consumers of her raw material. Texas, with her broad prairies and genial climate, the generous liberality of her people, and her geographical position, must furnish the natural outlet for the wealth of Mexico. Americans must build her railroads and mine her ores. The Southern Pacific Railroad must transport her gold, her silver, her iron, her copper, and her coal, eastward.

It is hardly to be presumed that Mexico will be so blind to her own interest as to refuse to construct various road to tap the main trunk of the Southern Pacific road. But suppose that her capitalists should refuse to invest, and the government refuse to advance the means—do we not know that American enterprise would step into her assistance? The Mexican government is very liberal in grants and charters, and it is the characteristic of our people to intrude themselves wherever money is to be made. Americans do not fear to invest on this continent, between the southern boundary of British America and the Isthmus of Darien, for they have an abiding faith that one after another of the American principalities will be added to the American constitution, until the

stars and stripes will wave over the capital of the Montezumas, as well as over the home of King Philip—over the grave of Columbus as well as over the tomb of Washington—over bloodstained Central America as well as over the peaceful domains of Ohio. Then tell us not that there will be no branches to tap the main trunk of the Southern Pacific Railroad. Then there is the California trade, immense and valuable, the migration to and from, the commerce of the Pacific, and the wealth of the Indies, to be borne over this immense road, winding like an endless serpent, through the fertile plains of Texas, the rich valleys of Mexico, and tapping the unfailing gold regions of California.

The monopoly of the Isthmus route can not live a day after this road is completed, and no road can be made to compete with it. Nature has marked out this route as the great thoroughfare between Europe and Eastern Asia. It will do what all the nations of Europe were seeking to do when this continent was discovered—open a direct route to the East Indies. It will be the realization of the dream of Columbus, and had Fulton lived before Columbus, he would himself have driven an iron horse across Texas, Mexico, and California to the shores of the Pacific.

What is known as the Butterfield overland route, traverses about eleven hundred miles of nearly the same line as the survey of this route. And under the management of the present gentlemen, who now conduct its operation, J. Edgar Thomson, Dr. J. Fowlks, Col. Stephenson, General Richardson, Samuel Tate, and others, there can be no question of its final completion. Mr. Thomson feels perfectly confident of being able to connect the Atlantic and Pacific Oceans by a railroad in ten years. In every section of the country this great highway of nature is now the great theme.

We learn that the Hon. T. L. Wigfall, the Senator elect from Texas, will devote his great energies to the accomplishment of this object, and at this time no one in his present relation can do more.

The pen has not yet been use which is to develop the real utility of this route, and while we acknowledge our inability to treat the subject in its true light, we shall continue to look for the appearance of a true picture of that portion of the country to be tapped by the above road, and to advocate its claims with the honest zeal of one who is ever ready to push on the the car of human progress.—*Artisan*.

PHILADELPHIA, Jan. 14.—Hon. J. Edgar Thomson has accepted the Presidency of the Southern Pacific Railroad, the terms and conditions required of him having been fully and satisfactorily met by Dr. Fowlks, the late President.

The policy of the Company for the future was agreed upon by Thomson and Fowlks, and cordially assented to by Hon. V. R. Stevenson, of Nashville, General Agent, and Hon. Samuel Tate, of Memphis, Commissioner of the Land Department. This arrangement secures, beyond reasonable doubt, the construction of the Southern Pacific Road.

Messrs. Stevenson and Fowlks left this evening for New York, and intend to proceed in a few days to Austin, Texas.

The subscription to the stock now exceeds \$700,000 for the construction of the road, and satisfactory offers have been made for all the stock now unsold. The stock books have been closed. A transfer office will be opened in Philadelphia, under the management of President Thomson.

COVINGTON & LEXINGTON R. R.

The adjourned meeting of the stockholders of the Covington and Lexington Railroad Company, to hear the report of the committee appointed at the annual meeting of the 27th Dec. last, to whom was referred the annual report of the President and Directors—was held at the City Hall in Covington, Tuesday.

On motion of Gen. Desha, Col. J. W. Leathers was called to the chair, and S. H. Cambron appointed Secretary.

Gen. Desha said that at the last annual meeting of the stockholders of the C. & Lexington Railroad, called by order of the old Board, which was held December 22d last, a report was presented by the President, and referred to a special committee of five to report thereupon at an adjourned meeting. The committee have discharged their duty so far as they were able under the circumstances. They have not devoted that time which the subject demanded, owing to the inability of some members of the committee to get together.—They, however, had a report which they would now submit to the meeting.

Mr. Zinn, chairman of the committee, thereupon presented the following

REPORT:

To the Stockholders and Directors of the Covington & Lexington Railroad Company:

GENTLEMEN:—Owing to the circumstances that almost invariably attend a gratuitous duty, (and where it is everybody's business it is generally neglected,) that part of the committee appointed at your annual meeting to investigate the late annual report of the officers of your road, that have given any attention to the matter, are not prepared to report in the manner the circumstances or contents involved would require under different circumstances.

Those sources that ordinarily should be open for information, have not responded to the request of the committee, and explanations asked of circumstances attending the recent sale of the road, though respectfully asked, have not been furnished.

From the slight examination given to the report, the committee are disposed to say that the duties of the subordinate officers of the road have been faithfully performed, and that there has been an apparent effort, on their part, to present the correct history of the operations of the road.

The reports of the President and Secretary show an increase of earnings for eleven months and five days of the current year, over the same time last year, of \$55,336 25; and that after paying the current running expenses, repairs of road, bridges, rolling stock, &c., rent of Lexington and Nicholasville roads, there was a surplus for the same period, in the net earnings, of \$227,734 77. The Superintendent has made no report of the condition of the road, but in November, 1858, he, with the concurrence of the President, reported that it was then in better condition than it ever had been, and inasmuch as \$46,623 36 was expended on repairs of the road during the eleven months and five days following, it is but fair to conclude that the road (with the exception of a few bridges) was in good condition when ordered to be sold.

The Secretary reports the amount of coupons past due on second mortgage bonds at \$105,000. Up to the hearing of the cause when the road was ordered to be sold, this (less \$35,000 due in Sept., 1859,) was the only amount for default in the payment of which a sale of the road was asked.

The disbursements for the road for the elev-

en months and five days, are reported by the Secretary, as follows:

DISBURSEMENTS.

Current running expenses, including balance due Nov. 1st, '55.....	\$253,844 84
Coupon interest.....	31,935 00
Bills payable.....	40,418 70
Real estate, right of way and construction.....	31,475 49
Old bank debts of the company.....	71,325 83
Amount paid J. S. Walker on final settlement.....	13,557 20
Amount paid W. A. Dudley, Coms. per order Court.....	22,973 54
Balance on hand Oct. 5, 1859.....	309 09

\$465,861 40

The committee have information tending to show that a portion of these payments could have been postponed, and the means applied to the payment of the claims in suit, and thus the sale of the road prevented, at least at that time. The late President of the company, although requested to furnish the committee such information as he "might deem proper," showing the necessity of making the payments marked three, four, five and six, to the exclusion of the coupons in suit, has not done so. Circumstances may justify him in this course; and the committee wish to be understood as not finding fault with this course, but merely reporting the facts. They also withhold for the present the information derived from other sources bearing upon these payments, as they suppose their publication would lead to counter statements and unprofitable controversy.

This information may be made use of in any legal proceedings in behalf of the old stockholders. The thanks of the stockholders are due to the gentlemen furnishing this information.

We recommend to the present Board of Directors, and others in interest, to take prompt action, in whatever course they may think proper to pursue, either to abandon this valuable property, which cost the stockholders over \$4,000,000, as irrevocably lost, or to take immediate measures for its recovery, either by purchase from the party claiming ownership, or by legal proceedings.

The committee are clearly of the opinion that the road should not be given up as lost; and recommend, in the first place—if the offer of Mr. Bowler to reconvey the road with all his securities, stock, and interest therein, upon repayment to him of the principal expended, with six per cent. interest, is still open for acceptance or negotiation—that it receive a candid hearing, and, if found equitable and practicable, and the company are able to repay upon such terms as he may require, we recommend its acceptance.

In the second place, if this fails to recover the road, or some interest therein, for the stockholders, we recommend prompt legal action.

Without abandoning the appeal from the sale of the road, let an independent suit be brought to set aside the sale. If action is delayed until the appeal is decided, it may then be found that the proper evidence is not before the court in that case; or the relation of the parties materially changed.

In view of all the circumstances of the case, and the information that the committee have been able to collect, as well from the report as otherwise, they are also clearly of the opinion that the sale of the road could have been prevented without loss to anybody connected with it, and they therefore report that the stockholders, in duty to themselves, can not oppose the last annual report, especially that part of it treating of the sale of the road.

In view also of the facts, that if the sale of the road is sustained, a large proportion of the third mortgage bonds and income bonds, will be entirely lost to the holders thereof,

and in that respect, reduced to the level of the stock, the committee recommend that the Board take measures to enlist them in the effort to recover the road.

The committee recommend the adoption of the following resolution, to wit:

Resolved, That this report be presented to the Board of Directors, as expressing the sense and wishes of the stockholders.

All of which is respectfully submitted.

LUCIUS DESHA,
PETER ZINN,
JOHN E. STEVENSON.

Covington, Jan. 24, 1860.

Mr. Zinn moved that the report be received and concurred in. Adopted.

Gen. Desha said he had a resolution which he desired to offer. He deemed it an act of justice to the late Treasurer of the road, and hoped it would be adopted. By the annual reports of the President for 1857 and 1858, to the stockholders of the Covington and Lexington Railroad, it appeared that there was an unadjusted balance of some \$78,000 due the Company from Mr. Walker, and the impression had gone out into the world that Mr. W. was a defaulter to that amount. From the report of the President for the past year, it appears that Mr. Walker was not a defaulter, but that there was a balance in his favor due from the company, of some few hundred dollars.

The resolution which he proposed to submit to the meeting, briefly set forth these facts and exonerated Mr. W. from any blame which might be attached to him.

Mr. Fimmel said he hoped the resolution would be withdrawn, that the matter might be referred to a committee to report upon. He suggested this course with a view that full justice should be done Mr. Walker.

Gen. Desha consented to withdraw his resolution, and on motion of Mr. Tennel, Messrs. Desha, Moor and Haines were appointed as such committee.

The committee then retired, and in a few minutes returned, and through their chairman, Mr. Desha, submitted the following:

Resolved, That inasmuch as the annual report of the President and Directors of this Company, for the years 1857 and 1858, shows unadjusted balances in the hands of Samuel J. Walker, late Treasurer and Bond Agent of said Company, and from said reports the impression had gone forth to the world, that said Walker has held funds in his hands belonging to the Company, and inasmuch as the report of said President and Directors, submitted on the 23d of Dec., 1859, shows, on the contrary, that the said company is really indebted to said Walker, both on his account as treasurer and as Bond Agent, in all to the amount of about \$40,000, we consider it but a simple act of justice that these facts should be made known to the world, and that the thanks of the company are due to the said Walker for his fidelity and indefatigable exertions in her behalf when engaged in her service.

Mr. D. Moore said he hoped the report of the committee would be adopted unanimously. He then alluded to the original trouble through which the road had passed when the Directors despaired of its completion, and at a time when they were heavily involved on account of individual endorsements with Mr. W. for the road, and were threatened with a loss of their entire fortune. When these troubles were bearing most heavily on the Board, Mr. Walker, with his means, credit, and untiring energy, succeeded in carrying the road through to completion, thus securing the road, and saving the Directors by purchasing certain

sections from the Company, and paying a large indebtedness by which the Directors were bound.

Mr. Benton, the former President of the Company, was glad to see this report presented, and hoped it would be passed without a dissenting voice. He remarked that he was in the Board at the time referred to by Mr. Moore, and could bear testimony to the very valuable services rendered to the Directors by Mr. Walker. That gentleman had devoted his time, his means and his energy to securing the completion of this road, one of the most important in the country, and but for those exertions, he very much doubted whether the road would ever have been completed. In his ambition and determination to carry the work through, he made heavy sacrifices and losses, which have never been made up to him. Mr. Fennel also spoke in complimentary terms of Mr. Walker. He said he was gratified to see this report coming from the source it did, and alluded to the exertions of that gentleman in behalf of the road, attributing to him, in a great measure, the completion of the line.

The resolution was unanimously adopted, and the meeting adjourned.

EFFICIENCY OF CONTINUOUS AND SELF-ACTING BRAKES FOR RAILROAD TRAINS.

[A paper read before the British Association, 1859.]

Of late years various improvements have been introduced upon railways, to diminish the dangers of traveling, and attention is now specially directed to the increase of the retarding power for trains by various kinds of brakes. From an early period in the history of railways, it was seen that few objects were more important for ensuring the security of passengers, and reducing the loss of time occasioned by stoppages, than the attachment of some means of destroying the momentum of trains with ease and rapidity: that is, in the least time and in the shortest distance. The less the time requisite to brake a train, the longer the steam may be kept on in approaching a station and the less is the loss of time in stopping. And the shorter the distance in which a train can be brought to a stand, the less danger is there of collision with obstructions on the line perceived not far off ahead. It is already allowed by many of those connected with railways, and has been expressly stated by the Lords of the Committee of Privy Council for Trade, that the amount of brake power habitually supplied to trains is in most cases insufficient, and their Lordships enumerate thirteen accidents from collision occurring in 1858, the character of which they consider would have been materially modified, if not altogether prevented, by an increased retarding power under the command of the guards of train.

Upon this subject the most important communication hitherto made has been the Report prepared by Colonel Yolland for the Railway Department of the Board of Trade, and containing a large number of experiments with heavy trains at high velocities. The brakes with which Colonel Yolland experimented were those which, as improvements on the common hand brake, have hitherto commanded most success. These were the steam brake of Mr. McConnel, the continuous brake of Mr. Fay, the continuous and self-acting brake of Mr. Newall, and the self-acting brake of M. Guerin. The general conclusions to which Colonel Yolland was led by his experiments resulted in the recommendation of the brake of Mr. Newall; and for heavy

traffic, a provisional recommendation of the brake of M. Guerin.

From a misunderstanding caused by this Report of Colonel Yolland arose the necessity for some further experiments on the similar brakes of Mr. Fay and Mr. Newall; and these I was called upon to arrange and carry out, by the directors of the Lancashire and Yorkshire Railway. I propose to lay before the Association a brief abstract of these experiments, with some remarks upon the conclusions to which they gave rise.

It will not be necessary here to describe minutely the details of the construction of these brakes. They consist essentially of a series of brake blocks acting upon every wheel of the carriages of the whole train, or some part of the train, the brake blocks being suspended as flaps or placed on side bars beneath each carriage, as in the ordinary arrangement of the guard vans. But whereas it would be both expensive and inefficient to work these brakes with a guard or brakeman to each carriage, both Mr. Fay's and Mr. Newall's patents provide for a continuous shaft, carried the whole length of the train beneath the framing, and with suited jointed couplings between each pair of carriages, so that they may be undisturbed by the rocking motion of the train or the action of the buffers. In this way the whole of the brakes may be worked by a single person at either end of the train communicating his power to each brake through the agency of the continuous shaft.

Again, there have been applied, in the first instance by Mr. Newall and subsequently by Mr. Fay, powerful springs beneath each carriage, connected with the arms of the rocking shaft, by means of which the brakes are made to act instantaneously throughout the train, on the release of a catch or disengaging coupling in the guard's van. The value of this provision for the immediate and simultaneous action of the whole of the brakes, in cases where an obstruction is perceived upon the line, will be at once evident. It is one of the most important features of these brakes.

In carrying out the views of the directors of the Lancashire and Yorkshire Railway Company, it was arranged, in order to test the relative efficiency of these brakes, to have a series of experiments upon the Oldham incline of 1 in 27 on this gradient. A train of carriages fitted with Mr. Newall's self-acting slide brakes, and a similar train fitted with Mr. Fay's continuous flap brakes, were started in turn, and after having passed over a measured distance by the action of their own gravity, the brakes were applied, and the distance along the line in which the trains were respectively brought up was carefully ascertained, as a measure of the retarding force of each. The trains employed consisted of three weighed carriages each, and having been placed upon the incline, they were started by removing a stop. Having then descended a previously measured distance with a uniformly accelerating velocity, they passed over a detonating signal, which conveyed notice to the guard to put on the brakes. Then the train having been brought to a stand, the distance from the fog signal to the point at which the train stopped was measured, and the train brought back for another experiment. In this way it was easy to obtain an initial velocity of 50 feet a second, or 35 miles, before applying the brakes.

Unfortunately, the day upon which these experiments were made proved misty and foggy, with rain at intervals, so that the rails were in the very worst condition for facilitating the stoppage of the train. The signifi-

cance of this fact will be seen on comparing the retarding power of the brakes in these experiments with those made in fine weather.

Reducing the results, we find that the retarding force exerted by each brake in terms of a unit of mass, was equivalent to the numbers in the following table:

EXPERIMENTS ON THE OLDHAM INCLINE.

MR. NEWALL.			
No. of experiments.	Velocity of train in feet per second.	Time in stopping in seconds.	Retarding force of brake.
1.....	25.71	14	1.32
2.....	30.00	16	1.63
3.....	37.50	17	1.70
4.....	42.85	25	1.69
5.....	42.85	14	2.01
6.....	48.38	19	1.78
7.....	52.94	17	2.04
Mean.....			1.74

MR. FAY.			
No. of experiments.	Velocity of train in feet per second.	Time in stopping in seconds.	Retarding force of brake.
1.....	25.71	13	1.91
2.....	30.00	13	1.79
3.....	37.50	14	1.81
4.....	41.37	15	1.76
5.....	40.66	12	2.02
6.....	48.38	25	1.72
7.....	50.00	17	1.91
Mean.....			1.85

The general result of these experiments gives a retarding force of 1.74 lbs. per unit of mass for Mr. Newall's brake, and 1.85 for Mr. Fay's. Or, in other words, Mr. Newall's brake exerted a retarding force of 121.3 lbs. per ton weight of the train, and Mr. Fay's a retarding force of 129 lbs. per ton.

I afterward arranged for some further experiments at Southport upon a piece of level rail between that town and Liverpool. The speed requisite in this case had to be obtained by the aid of an engine, which was detached by a slip coupling at the instant of applying the brakes. In other respects these experiments were conducted like the preceding, with fog signals, and the time noted by stop watches. The weather, however, was, in this case, fine and dry, and hence the following results were obtained in most uniform circumstances.

The friction of the train itself, and the resistance of the air, was ascertained, to amount with Mr. Newall's train to 6.4 lbs. per ton, and with Mr. Fay's train to 10.4 lbs. per ton.

EXPERIMENTS AT SOUTHPORT.

Slide brakes; Engines detached.

MR. NEWALL.		
Speed in miles per hour.	Distance of pulling up in yards.	Retarding force of brake.
32.72	56½	6.77
36.73	77	6.28
43.90	136	5.08
46.15	140½	5.42
52.94	205½	4.89
54.54	192	4.66
47.37	260½	
53.73	222	5.23
63.16	273	5.55
Mean.....		5.49

MR. FAY.		
Speed in miles per hour.	Distance of pulling up in yards.	Retarding force of brake.
35.29	56	7.97
43.90	98	7.05
50.00	129	6.94
54.54	144	7.40
54.54	161	6.59
37.89	97	5.30
60.60	204½	6.40
50.00	214	6.93
Mean.....		6.70

In this case we have a retarding force per unit of mass equivalent to 5.39 lbs. in Mr. Newall's brake, and 6.7 lbs. in Mr. Fay's. Or, in other words, the retarding force of the slide brakes of Mr. Newall, from eight experi-

ments, at velocities varying from 35 to 60 miles an hour, was equivalent to 382.6 lbs. per ton weight of the train. The retarding force of Mr. Fay's slide brake, from eight similar experiments, at velocities from 33 to 63 miles per hour, was equivalent to 466.4 lbs. per ton weight of the train.

FLAP BRAKES—ENGINE DETACHED.

MR. NEWALL.		
Speed in miles per hour.	Distance of pulling up in yards.	Retarding force of brake.
50.00	132½	6.75
50.00	123	7.28
51.43	193	4.93
Mean.....		6.32

MR. FAY.		
Speed in miles per hour.	Distance of pulling up in yards.	Retarding force of brake.
51.43	158½	5.98
61.43	162½	5.89
54.54	184	5.79
Mean.....		5.87

These experiments give for the retarding force of Mr. Newall's flap brake 6.32 lbs. per unit of mass, and for Mr. Fay's, 5.87 lbs.

Or, in other words, the retarding force of Mr. Newall's flap brake, from three experiments varying from 50 to 51½ mile per hour, was equivalent to 440.3 lbs. per ton weight of the train.

The retarding force of Mr. Fay's flap brakes, from three similar experiments, was 408.6 lbs. per ton.

We may illustrate the general bearing of these experiments by estimating from an average of the whole experiments the distance required to stop a train fitted with these brakes, and detached from the engine:—A train would be stopped at a velocity of

20 miles an hour in.....	23.4 yards.
30 " " ".....	58.9 " "
40 " " ".....	93.8 " "
50 " " ".....	146.8 " "
60 " " ".....	211.5 " "

The last table exhibits, in a very clear manner, the advantages of this class of brakes, in which the whole weight of the train aids in destroying the momentum of the mass instead of the weight of one or two guard vans only. It may be impossible in long trains to apply these brakes to every carriage; but at all events, in the ordinary traffic, three times the present amount of brake power may be employed with ease.

On the score of economy, also, the system appears to encourage its application. From experiments which have been made, it appears that the wear of the tyres is far more uniform and equal, because the springs may be so adjusted as not to cause the wheels to skid. The managers of the East Lancashire Railway states that with two trains running together between Salford and Colne, the carriages fitted with continuous brakes traveled 47,604 miles before the wheels required turning up; whilst an ordinary brake van, running the same distance, had to have its wheels turned up three times in the same period, three-eighths of an inch being taken off each time.

EXPERIMENTS AT SOUTHPORT.

Engine not detached from the trains.

MR. NEWALL.		MR. FAY.		REMARKS.
Speed per hour....	Distance of pulling up.	Speed per hour....	Distance of pulling up.	
Miles.	Yards.	Miles.	Yards.	
33.96	124½	31.8	121½	Engine and tender. Tender brake applied. Tank engine.
37.11	169½	33.86	137	
41.86	221	41.86	192½	
		51.43	274	

It will be observed that on most through lines the trains travel on some portion of the distance at the rate of 60 miles an hour; and in the event of an obstruction half-a-mile in advance a collision would be inevitable unless the driver has the power and the presence of mind to act with promptitude. Now, at 60 miles an hour there is only 30 seconds, or half a minute, to effect that object, and it is quite impossible to apply the brakes in their present state before the train—in such a precarious position—is in actual contact. Assuming, however, that brakes upon the principle of Newall and Fay were attached to the engine as well as the train, and that the driver had the power of instantaneous application, by liberating a spring, it is evident that instead of the train dashing forward to destruction, the momentum might be destroyed in a distance of less than 500 yards, and that without injury to life or property. Besides, the application of the electric telegraph, which prevents on most through lines more than one train being on the line between the stations, is a great additional security, and that united to the continuous brake *applied to the engine as well as the train* would, when united to a more perfect system of signals, render collision next to impossible.

THE SUEZ CANAL.

The long pending question of canalizing the Isthmus of Suez seems likely at last to meet its solution. France, Russia, Austria, Prussia, and Sardinia, have made a joint demand upon Turkey for power to commence the undertaking. The Sultan, however, for the time being withholds his assent, referring the applicants to the British Government, at whose request he had previously engaged to disfavor the project. It is now a secondary consideration whether the scheme is practicable. George Stephenson has said that it is an impossibility. M. Lesseps says confidently that it can be done, and is prepared with both the financial and engineering requisites for realizing his idea. Be this, however, as it may, the leading Powers, all except England, have resolved on making the experiment, and the British Government and its friend the Sultan must yield to their decision. If England withstands the joint Powers, their remedy will be to bring the question into the Congress, when a united vote will easily carry it. It is not, however, easy to conceive why the British Government should be opposed to the proposal. It is reasonable to expect that, as a free trade country, England would be prepared to remove every obstacle to the movements of commerce whether they existed in the form of legislative enactments or of natural obstacles. As the greatest commercial country in the world, she has more advantage to expect from a shortening of the route to the Eastern markets to the extent of some thousands of miles, than any other nation. Indeed it is just the sort of a project for England to originate, and one of the last for her to oppose. Every advantage that the canal would afford to any other country would be conferred upon her in a still larger ratio. She would have a direct route to her immense Indian Empire, and to the markets of her Australian Colonies, which alike for the purposes of commerce or of protection would be of incalculable value. Even if it be true, as has been asserted by a commission of the Government of Holland, that—owing to the uncertainty of the winds on the new route as compared with that of the open Atlantic,—an ordinary sailing vessel would lose 20 days out and home, via Suez, besides the tolls of the canal and the extra cost

of insurance on the Red Sea, yet it does therefore follow that great commercial and political advantages would not accrue to England by opening the proposed route. There is a power now that can impel our vessels across the waters independently of the chances of the elements, and if sailing vessels could not carry advantageously by way of the Isthmus, why not employ steam? If it be answered that steamers would so enhance the cost of freight as to render their use impracticable for carrying merchandise, we point to the shipping trade as between the United States and Great Britain, in which every year steamers are rapidly lessening the cargoes of sailing ships. English shippers would find the great saving of time to be worth all the extra freight and insurance, and the necessary heavy canal dues connected with the new route. But even if were true that the carrying of heavy freight by the proposed route were impossible, yet the large mail and passenger traffic should surely render the project worthy of the hearty support of the British Government. Possibly England may be timid about opening such a ready gateway for the passage of hostile arms to her Eastern possessions; but it is to be remembered that whatever assistance might be given by the canal to a warlike movement by any European Power, would be equally advantageous for the ready transport of her own troops. We are reluctant to believe that a country so eminently under the control of a broad commercial spirit as is England, can be found long persisting in opposition to a scheme which would not only be one of the greatest efforts of modern engineering, but an equally important amelioration of the interest of international trade. She goes to the Paris Congress as the disinterested representative of Italian freedom, surely she will not appear there also in the anomalous position of a selfish commercial monopolist. There is a chance for England to quietly back out of the position she has not yet decidedly assumed; and for the sake of her reputation it is to be hoped that she will do so. An impression prevails with that government that the scheme is impracticable; be it so, that is a utopia; still so long as the project is undertaken by Continental capital, why intrigue with the Sultan to prevent its realization? There is at last a bare chance of success even according to George Stephenson, and if upon the strength of a shadowy possibility another country thinks proper to commence the work, England should at least commend the enterprise of her neighbor, if she did not think proper to share its risks. There is no single aspect in which the apparent position of England on this question appears creditable; until, however, she shall have fully declared herself upon it, fairness demands a partial suspension of judgment. In these times of engineering skill and trading dispatch, it is a discredit to the enterprise of European capitalists that their ships should have taken a long semi-circular route to the East, when by constructing a canal about one fourth the length of the Erie they could open a diametrical course leading direct to the whole Eastern Hemisphere. The possibility of the work is demonstrated by the fact that it has been already done under much less favorable circumstances. During the times of the Ptolemies a canal was in existence, which afterward fell into disuse, and can now be only indistinctly traced. With inferior appliances, and less necessities, the ancients could channel the Isthmus, and is modern Europe to confess its incompetency to the undertaking? We suppose the Isthmus of Suez has a natural right to its position as a separatist between the East and West; but it seems as though it had been thrown there by a freak of nature to test

the enterprise of the inhabitants of the Western hemisphere, and to show with what trifles she can defy the power of her boastful son.
—*Economist*.

THE PORT ROYAL RAILROAD.

By an enactment of the Georgia Legislature, a charter has been granted to continue this road from the South Carolina side of the Savannah river near the Sand Bar Ferry, to the city of Augusta. This was the only link wanting to make this one of the most important enterprises in the Southern country. The Charleston and Savannah Railroad now is in operation to the fifty-five mile station from Charleston. It is proposed to run the Port Royal Road from some point between the fifty-two and fifty-five mile stations to Augusta. The estimated distance will not exceed 80 miles. This, added to the 55 miles to Charleston, will make the distance not over one hundred and thirty-five miles from Charleston to Augusta. This is an extreme calculation, and even at this, the distance will be shorter by a few miles than the South Carolina Road, as now run over between those cities. This road will go through a new country—a country that has hitherto contributed but little to the trade of Charleston. Its contiguity to the Savannah river naturally draws its trade in that direction, and it has hitherto paid tribute to Savannah. This portion of Barnwell District is wealthy, and the people are able to do much toward the construction of this road. The road is to run between the great seaport of the South Atlantic and the most flourishing inland town in the South. The country through which it is to pass is as well adapted to the easy construction of a railroad as any other portion of the globe. All the facilities for construction are scattered broadcast in profusion along the line, and there are no obstructions whatever in the way from the Salkahatchie to the Savannah. If this road is to run from Charleston to Augusta, why the name of "Port Royal?" The solution is very easy. The exclusive charter given to the South Carolina Railroad prohibits any other road being built between Charleston and Hamburg, within a distance of twenty miles of that road. The monopoly was complete. The charter for the Charleston and Savannah Road was granted. This opened the way for a branch Road to Augusta, at a distance beyond the "twenty miles" from the South Carolina Road. As the junction would be near the Pocotaligo, which is one of the streams that form the head-waters of the harbor of Port Royal, it was perfectly natural, and competent to give it that appellation. Nor was this the only reason—the harbor of Port Royal is equal to that of New York, and exceeds in capacity every other port South of that city. It was designed to attract attention to this fact, and to demonstrate that this of a necessity must be a very important Road; for if Charleston could not achieve for herself and the South commercial deliverance, an account of her shallow Bar, that here, at Port Royal, at a distance of only one hundred and ten miles from Augusta, any vessel that could reach the docks of New York, could enter and lie alongside of the wharves at Port Royal. The importance of this road to both Charleston and Augusta must be admitted; and as the friends of this project are in earnest, and are now preparing to take active steps in its furtherance, we would invite the consideration and scrutiny of the public to its claims and capabilities.

—*Charleston Mercury*.

RECEIVER'S SALE OF THE MARIETTA AND CINCINNATI RAILROAD.—The Receiver of the Marietta and Cincinnati Railroad advertises the property of the Company, including the road, the right of way, machinery, and every thing belonging to the corporation, for sale at the Court house, in the city of Chillicothe, on Saturday the 25th day of February next, between the hours of ten and four o'clock. The sale will be made under the recent decree of the Court, of which we have already published a synopsis, and which provides that the property shall not be sold for a less sum than \$200,000, the highest bidder being required to deposit with the Receiver the sum of \$100,000 in cash, or \$500,000 in first mortgage bonds of the Company, as security for the payment of the bid, which deposit is to be forfeited in case the conditions of the terms of sale are not complied with.

PORT ROYAL RAILROAD.—NO. 2.

A newspaper writer who advocates a particular railroad project must, of necessity, go over the same prominent points of the enterprise he is advocating, and, therefore, must be liable to the charge of repetition. It is essential to a clear understanding of the subject, that every special article written should be rendered intelligible to the casual reader, who may, perchance, be induced to take interest in such an enterprise. The constant readers of the *Mercury*, who have done the writer of these various articles which have appeared from time to time in its columns on this subject the honor of reading them, will, therefore, over look what to him may appear to much repetition. Now that actual operations are about to begin, it is very important that each point in this enterprise should be exhibited to the every interest that is to be benefited by it in its strongest view. And first, what benefit is it designed to bestow upon the city of Augusta? At a very recent meeting of the inhabitants of Augusta, at which a number of the most prominent citizens were present, very decided and spirited resolutions were adopted for the purpose of extending railroad connections to Macon. This movement indicates what importance the people of that city attach to railroad connections, as Augusta is now joined with Macon, though by a tortuous road. She has another road to Chattanooga, and another to Columbus. She has proposed extensions by railroad along the Savannah valley to the mouth of the Blue Ridge at Anderson. If this Blue Ridge Road is finished, this line would be one of the short outlets to the ocean from the Tunnel. Augusta has now one railroad to Charleston and one to Savannah, and in addition to these, she has the Savannah river navigable to her wharves for a greater portion of the year. Yet, with these pathways to the ocean, her commercial facilities have been hampered for want of a rival road and cheaper transportation to the seaboard. If Augusta desires a larger share of intercourse with the cities and towns beyond her, it will be absolutely requisite that she shall have greater facilities of access to the ocean. For her the most feasible and the most economical method of constructing this outlet is to encourage the Port Royal Railroad. It will tap the Charleston and Savannah Railroad at a distance of about fifty-two miles from each of those cities, making the distance both to Charleston and Savannah as short from Augusta as it is now to those cities, either by the Waynesborough or the South Carolina roads. This Port Royal Road will furnish Augusta with two roads, both to Charleston and Savannah. She will enjoy the benefit of rival roads,

instead of, as now, contending against monopolies. But how infinitely beyond all other enterprises would this Port Royal scheme loom up in importance to the interests of Augusta, when this same deep harbor at Port Royal becomes, as it one day must be, the great mart of the cotton region! Augusta will then be only 110 miles to deep water. Much nearer than Columbia—nearer still than Macon—her geographical position would make her one of the portals through which the products from the fertile West are destined in the future to pass through by this, the shortest, pathway to the Eastern Continent. If Augusta is but true to her interests and her destiny, a great future is before her. Let her join heartily in this enterprise, and at a comparatively small outlay, open for herself another road to the ocean. E.
—*Charleston Mercury*.

MARIETTA & CINCINNATI RAILROAD.—It will be remembered that this road with all its equipment, real estate and property of every description is to be sold on the 25th of next month. It has transpired that during the recent visit of NOAH L. WILSON, Esq., to Europe a complete understanding was had with regard to the future of this really great line in the event of an order of sale by the Courts of Ohio. Immediately upon the return of Mr. WILSON all opposition to a sale on the part of the Company was withdrawn, and the Court at Chillicothe ordered a peremptory sale. A Company is now nearly formed embracing the pecuniary ability to bid the minimum amount prescribed in the decree, and the class of men whose names will give character to the enterprise. It is understood that, upon compliance with certain terms, the reasonableness of which is conceded on this side, and the procurement of an act of the Legislature, to which there can be no objection from any quarter, the bondholders will be prepared to advance a sum of money sufficient to complete the permanent way of the Marietta and Cincinnati road between Loveland Junction and Belpre, opposite Parkersburg. The bridges will be rebuilt, the shoter tressels perpetuated, and the tunnels finished for the scheme embraces the perfection of the line from Athens to Belpre via Scott's Landing. We regret that the Hocking Valley line to Belpre direct has not been adopted, but, at the same time, remark that it is due to the men who have so persistently struggled at home and abroad for the completion of the great Railroad of Southern Ohio, that their tenacity for the original conception of the road as a line to Philadelphia as well as to Baltimore, should be respected everywhere. Adopting this original idea of the Marietta and Cincinnati road as having, at the city of Marietta, an alternative connection with the Baltimore and Ohio via Parkersburg, and the Pennsylvania Central via Wheeling, the policy of perpetuating the present Athens and Marietta line must be approved.—*Cin. Com.*

NEW YORK CENTRAL RAILROAD.—In the year 1856, the Central Railroad did a very large freight business, but, notwithstanding all this, the year just closed has been far more prosperous. It has delivered at Albany, 4,000 cars of freight more than during any former year.

The project of extending the Evansville and Crawfordsville road from Terre Haute to Rockville, we see it stated, does not seem to move along very rapidly.

CUMBERLAND RIVER RAILWAY BRIDGE.—The bridge over the Cumberland river at Nashville, recently completed by Bristol, McCallum & Co., of Cincinnati, is one of the finest structures of the kind in the country. It is of the same character of work as the elegant bridge on the Ohio and Mississippi Railroad over Millcreek, on the west side of Cincinnati, but much larger, and is constructed with a draw for steamers. It is jointly owned by the Louisville and Nashville and Edgefield and Kentucky Railways, though built under the immediate direction and control of the latter.

Its extreme length is 700 feet, made up of four spans—two fixed, one on each side, and two draw spans in the middle. Each fixed span is 200 feet in the clear between supports. Each draw span is 120 feet in the clear between piers—they are the largest railway draws in the world; the one at Rock Island being second. This is 120 feet wide on one side, and 116 feet wide on the other. The total length of draw from one extremity to the other of the moveable portion is 200 feet; and its entire weight is computed at 285 tons. It can readily be turned into position by one man in four minutes, and by two or three men in two and a half minutes.

The bridge superstructure is of the kind known as the McCallum's Truss; by Gray, Whiton & Co., contractors. The center pier on which the immense draw turns is 30 feet in diameter at the top, 34½ feet at the bottom, 68½ feet high, and contains 2,295½ perches of masonry.

The eastern main pier is 75½ feet high, and contains 1,208½ perches of masonry. The western main pier is 70½ feet high, containing 1,093½ perches of masonry. The foundations of all the piers are laid smoothly upon the solid rock, in water about 12 feet deep at mean low water. The extreme rise of water in the river at the point where the bridge stands is 57 feet. The total quantity of material in the bridge is 6,800½ perches of masonry; 354,000 feet of timber, and 160,000 pounds of iron.—*Am. Railway Times*.

AMERICAN STOCK JOURNAL.—The Jan. 1860. number of this valuable Journal is on our table, and thoroughly filled with matters interesting to the Stock Raiser and Farmer.

It is published monthly and at 25 Park Row, New York, at one dollar per year; and each number contains 32 large octavo pages, handsomely illustrated. The engravings of the improved Kentucky Sheep and other animals, in the number before us, are well worth the subscription price.

LAURENS RAILROAD.—Col. H. W. Garlington having some time ago resigned his office as President of this road, at a called meeting of the Directors, in this village, on last Tuesday, Col James H. Irby was elected to fill out the unexpired term of Col. Garlington who was elected at the same meeting a Director, to serve until the next regular meeting in September.—*Laurens Herald*.

KEOKUK, FORT DES MOINES AND MINNESOTA RAILROAD.—The Keokuk, Fort Des Moines and Minnesota Railroad Company have purchased 4,500 tons of iron in New York, to be delivered early in the spring at Keokuk. This will be sufficient to complete the track to a point sixty-five miles into the interior of Iowa, from Keokuk.

SOUTHERN PACIFIC R. R.

It is stated that Mr. J. Edgar Thomson, of the Pennsylvania Railroad, has accepted the Presidency of the Southern Pacific Railroad; and that V. K. Stevenson, President of the Nashville and Chattanooga, is to act as its General Agent. Samuel Tate, of the Memphis and Charleston, is to be Commissioner of the Land Department.

This is certainly a strong array of names. All of these gentlemen occupy high positions, and are widely and favorably known as successful men, possessing a wide experience in railroad affairs. If they all give themselves heartily to this new enterprise, their well known energy and abilities can not fail to accomplish very important results.

We presume these gentlemen, if they have connected themselves with this work in the manner stated, propose no half-way measures, nor the construction of a section of road of only a few hundred miles in extent. If they had no objects beyond this, they could have found plenty of work nearer home.

One thing is certain. A Pacific Railroad will never be completed, unless undertaken; and all have seen enough of railroads to know that what had a very small, and often apparently inadequate commencement, ripens, in time, into a great and successful achievement. We are not informed as to the plans of these gentlemen, but we suppose that, in due time, they will bring out a scheme which shall bear some proportion to the magnitude of their undertaking. They all know how to build railroads, and the difficulties in the way of their construction, and have measured well, we presume, the difficulties before them.

Should they commence their road and push it vigorously forward, they will have gained one important advantage. By attracting the attention of the country, they lay the foundation of a conviction that theirs is the best route, and they are to be the successful competitors for the great prize. In a moral point of view, this is a very great advantage, and one which they will not be slow to turn to account.

The first point aimed at, we presume, is El Paso. The territory traversed thus far, 800 miles, is in the State of Texas. Beyond this, to the eastern boundary of California, the assistance of the general government, we take it, will be sought. San Diego will be the first point made for on the Pacific. It has a pretty good harbor, but it is not San Francisco. That point, we presume, is embraced in the programme. The majority of the people of California prefer a more northern route, for fear that should a road be constructed to San Diego, it would be a long time before it would reach San Francisco.—*American Railroad Journal*.

(From the Galveston News.)

RAILROAD MEETING.

The Houston Tap and Brazoria Railroad placed on a footing of equality with the most favored roads in the State, and entitled to the State Loan of \$6,000 per mile.

EDS. NEWS:—According to previous appointment, a large and enthusiastic meeting of the citizens of Wharton county, consisting of both ladies and gentlemen, was held in the town of Wharton, on Thursday, the 29th inst., and after partaking of a sumptuous Barbecue prepared for the occasion, the company adjourned to the court-house, when the meeting was organized

by calling Col. David T. Stevens to the chair. Upon motion, Jas. D. Whitten was appointed Secretary.

The chairman then, in a forcible and pointed speech, explained the object of the meeting. That we have met for the purpose of expressing our satisfaction and thanks to the Legislature for the aid of the State loan of \$6,000 per mile extended to the Houston Tap and Brazoria Railway Company. An enterprise which affected in no little degree the good of our county. That we had also met for the purpose of returning the thanks of the county to our able and talented Senator, George Quinan, for the many and valuable services rendered the county in promoting this enterprise. That the services of Mr. Quinan, while both in and out of the Senate, had been the moving power of this mighty work.

Mr. Quinan was then called for, and through a deafening applause came forward. And for an hour and a half addressed the meeting with that force and eloquence so characteristic of the speaker.

Jas. D. Whitten then offered the following resolutions, which were unanimously adopted:

Resolved, That we learn with the greatest satisfaction the recent action of the Legislature in relation to the Houston Tap and Brazoria Railroad Company, in extending to that company the loan of \$6,000 per mile, and placing it upon the footing of the most favored companies.

That we earnestly impress upon said company the immediate prosecution of their work, and will extend to them our cordial co-operation in this undertaking, so necessary to the progress of our county, and we call upon our fellow citizens of the neighboring counties to come forward and co-operate with us in this work.

Upon motion it was then resolved that the proceedings of this meeting be published in the Democrat & Planter, and Galveston News, and that all papers friendly to the cause be requested to publish.

Upon motion the meeting then adjourned.
DAVID T. STEVENS, Chairman.
JAS. D. WHITNEY, Secretary.

THE RAILROAD BRIDGE.—We visited our new railroad bridge, a day or two since, and took a walk from one end to the other, and back again, making a nice little trip of near four miles.—The work was nearly completed, only some two hundred feet of stringers being required to finish the wood work, ready for the iron, which will be laid immediately, and we hope to soon hear the shrill shriek of the locomotive, and the rumbling of car wheels in our midst. The work upon the bridge has been executed in the most substantial and creditable manner, and could means be devised to protect the piles from the ravages of the marine worms, twenty or more years would pass ere a new bridge would be required. The draw, which is about 140 feet in length, and of great strength, is so nicely adjusted, that one man only is required to open and close it.

The water for two-thirds or more of the distance across the bay, (9600 feet, or about 1000 feet less than two miles,) averages only about three feet in depth, consequently, an embankment could easily be made for a portion of distance, leaving space enough open to admit of the ebb and flow of the tide, or the free passage of the water during a severe storm. By this means the piles would be protected, and only the unprotected ones would ever have to be replaced. By some, it is thought that an embankment would prove such a barrier to the

free discharge of the waters of the bay, that a sudden norther, after an east or south-east wind, would force the accumulated waters across the Island into the Gulf, thus causing the destruction of our Island; but this is a mere conjecture, and might or might not prove true.

We would suggest that two or three good coats of coal tar, put on hot, covering all the upper and exposed portions of the bridge, would add greatly to its durability, if not beauty.

The bridge has cost our city \$100,000—ten dollars and forty-two cents per foot—and we doubt not but what our citizens will be repaid four-fold within the next five years, by the increased business derived thereby.—*New Orleans Delta*.

RAILROADS IN WISCONSIN.

Editor Railroad Journal:

DEAR SIR:—Enclosed I send you an Act passed by the last Legislature of Wisconsin, which has an important bearing on the foreclosure of railroad mortgages in that State.

As eastern parties have commenced proceedings of foreclosure against several railroads in Wisconsin, the publication of this Act in your *Journal* at this time may be of service. I am informed by good legal authority this law is binding on trust deeds or mortgages of railroad property executed by its passage as well as those after.

Yours truly

C. H. ROBERTS.

AN ACT to amend chapter seventy-nine of the revised statutes, entitled, "Of Railroads."

The people of the State of Wisconsin, represented in Senate and Assembly, do enact as follows:

§ 1. Section thirty-eight of chapter seventy-nine of the revised statutes is hereby repealed.

§ 2. In case of any sale of any railroad, or of any portion of any railroad, with its appurtenances, property, right of way, franchises, and privileges, or any of them, under and by virtue of any trust deed or mortgage, now executed, or that may be hereafter executed, upon the same, such sale, when made in accordance with the provisions contained in such trust deed or mortgage, shall be absolute, unless the said company, or any subsequent encumbrancer, shall, within one year from and after the date of such sale, redeem said railroad and property so sold, by paying or depositing the amount of the purchase money on such sale, and the cost of such sale, and the interest thereon, at the rate of ten per cent. per annum, with the trustee or party making the sale, or with the court in which the decree ordering said sale is entered; and any such sale shall not be required to be made in accordance with any other law of this State for the sale of real estate under the foreclosure of mortgages, or otherwise.

§ 3. The party so redeeming shall pay to the purchaser or purchasers at such sale, the value of all substantial and necessary improvements made by such purchaser or purchasers after the sale, whether in the further construction of said road, or for the better use and enjoyment of the same, with interest thereon, as hereinbefore provided, within sixty days after the value of such improvements has been agreed upon between the parties interested. And in case they can not agree, the same shall be determined by three commissioners, who shall be competent engineers, and who shall be appointed by the chief justice of the Supreme Court, on the application of either party interested, on ten days notice of such application.

§ 4. It shall be the duty of such commissioners, immediately after the value of such improvements, under oath, in such manner and upon such testimony as they may deem proper, and with all possible dispatch to report the result of their deliberation, together with all evidence taken by them, to the clerk of the court where the decree of sale was entered; and in case the sale is made by virtue of any provision in such trust deed or mortgage, such determination and report shall be filed with the clerk of the Supreme Court. The decision of any two of such commissioners, so filed, shall be final and conclusive between the parties, as to the amount to be paid for such improvements.

§ 5. Upon depositing the sum of money named in such report, with the clerk of the Circuit or Supreme Court, as the case may be, the person so redeeming shall be entitled to the full possession, enjoyment, and occupancy of said road.

§ 6. The provisions of sections two, three, four and five of this act, in so far as they authorize any redemption after the sale of any railroad, or any portion thereof, with its appurtenances, shall not be applicable to any mortgage heretofore executed by the Chicago, St. Paul and Fond du Lac Railroad Company, but the sale of the railroad of said company, when made in accordance with the provisions contained in any trust deed or mortgage now a lien upon the same, shall be absolute and final.

§ 7. This act shall take effect and be in force from and after its passage.

Approved March 1 1859.

MONETARY AND COMMERCIAL.

The past week has been marked by a decided change in the aspect of monetary affairs. It opened with a very stringent market, currency was scarce, and the discount houses were unable to take the amount of paper offered. This threw a great deal of good paper on the street, at high rates. Towards the close of the week matters began to amend, and we may now quote the market easier than it has been before during the winter. Rates rule at before regular transactions at 10 to 12 per cent., outside rates 15 to 24.

Exchange on the East which has been ruling as high as $\frac{1}{2}$ premium at the close of the week declined to $\frac{1}{4}$ to $\frac{1}{2}$ selling. New Orleans $\frac{1}{2}$ buying to $\frac{1}{4}$ and 1 prem. selling.

The market for provisions has been firm during the week. The demand, although not unusually large, has been fair. Dealers, however, anticipate a decided increase of trade.

Matters at the East have also passed the culminating point, and money is quoted easier than for some time past. Stocks have improved during the week.

NEW YORK AND ERIE.—We give the entire report of Mr. Marsh, Receiver of this Corporation, as most of the items are of interest to Railroad men:

Monthly Statement of the Receiver of the New York and Erie Railroad Company.

RECEIPTS.

Nov. 30—1859.	
To balance per last report.....	\$176,736 77
Less Bills for supplies omitted.....	14 81—176,721 96
Dec. 31:	
Rents collected.....	1,070 00
Old bills sold.....	20,003 30
Discount on currency.....	60 25
Acceptances issued for wood.....	2,404 14
Ontario Steamboat Co.....	27 20
Northern R. R. Co.....	111 60
Car charts loaned conductors.....	100 00
Charter of Steamer.....	200 00
Damaged goods, etc., sold.....	555 85
Freight and passenger receipts.....	608,791 54
	633,339 47

Total receipts.....\$810,061 35

DISBURSEMENTS.

Dec. 31, 1859.	
By interest on First Mortgage Bonds.....	\$151,725 00
By Paymaster for Expenses.....	222,321 84
By charges on Freight.....	164,308 98
By Long Dock Co. for interest.....	35,408 68
By acceptances for supplies.....	4,856 64
By D. S. Magie for Coal.....	702 00
By Winslow, Bush & Strong ac. judgment.....	15,000 00
By Kent Chemung Railroad.....	2,500 00
By Kent Elm., Jeff. & Can. Railroad.....	2,063 84
By sundry ticket balances.....	9,462 75
By interest on acct. and disc't on unct. money.....	
By sundry bills for supplies, etc.....	123,545 81
By amount applicable to pay interest on First Mortgage Bonds.....	55,545 00
	\$782,866 43
By balance on hand.....	27,176 00
Total.....	\$810,061 43

The business of the North Pennsylvania Railroad for the last two months of 1859, shows as follows:

November, 1859.....	\$31,780 38
December, 1859.....	31,269 28
Total.....	62,999 66
Same time last year.....	51,957 94

Increase.....11,031 72

Or rather more than 21 per cent.

The New Jersey Railroad and Transportation Company have declared their usual semi-annual dividend of 5 per cent., payable on 1st of February next, leaving a surplus of net earnings for the year amounting to \$196,000.

The gross earnings of the Road for 1859, are....\$1,025,000
Current expenses, repairs, operating road, etc....382,000

Net earnings.....\$843,000

Making a ratio of 30 $\frac{1}{2}$ per cent. of expenses to gross earnings.

WESTWARD-BOUND FREIGHTS TO DETROIT.—The following is the schedule of rates upon Westward-bound freights from the points named to Detroit:

	1st class.	2d class.	3d class.	4th class.
Per 100 lbs. Per 100 lbs. Per 100 lbs. Per 100 lbs.				
Boston.....	\$1 30	\$1 03	\$0 75	\$0 56
New York.....	1 20	95	70	50
Buffalo.....	50	40	30	22
Susp. Bridge.....	50	40	20	22
Toronto.....	50	40	30	22

REDUCTION IN ALL RAIL RATES FROM NEW YORK TO NASHVILLE.—At a meeting of the general freight Agents of the four trunk lines, at the St. Nicholas Hotel, New York, on Thursday evening last, an important reduction in freights to Nashville was made. The following is the old and the new schedule:

From New York to Nashville.

Old.....	222	177	143	100
New.....	195	160	120	90

The Southern lines agreed that the river rates from Pittsburg to that Point should be 170, 145, 110, 80.

Annexed is the detail of the earnings of the Galena and Chicago Union Railroad Company for the first week in January:

	1859.	1860.*	Decrease.
Freight.....	\$8,460 12	\$7,219 65	\$1,240 17
Passengers.....	7,191 60	4,902 75	2,288 85
Mails, etc.....	750 00	750 00	.....
Total.....	\$16,401 72	12,872 70	8,529 02

*Two Sundays and a Holiday.

The earnings of the Detroit and Milwaukee Railroad for 1859, were \$186,087 in excess of the previous year.

The following is a comparative statement of the earnings and expenses of the Buffalo and State Line Railroad Company for December, 1858 and 1859:

	Passengers.	Freights.	Oth. Sources.	Total.
1858.....	\$27,292 84	\$52,611 24	\$1,174 20	\$81,078 28
1859.....	27,034 33	55,430 41	1,416 19	83,880 93
Increase.....	.....	2,819 20	241 99	2,802 68
Decrease.....	258 51	.....	.....	.....
	Construction.	Maintaining Repairs.	Operating.	Totals.
1858.....	\$543 51	19,772 98	4,538 36	20,179 50
1859.....	.....	15,684 87	5,296 46	14,550 68
Inc.....	.....	758 10	.....	758 10
Dec.....	543 51	4,083 61	.....	4,627 11

The Pottsville Miners' Journal of Saturday publishes its annual review of the Coal Trade of the United States for 1859. The following table will show the amount sent to market from the several regions:

	1858.	1859.	Inc.	Dec.
By Reading R. R.....	1,512,669	1,632,933	.....	.....
Trevorton Coal.....	.....	23,679	.....	.....
By Canal.....	1,823,804	1,872,021	66,584	.....
From Pinegrove.....	76,902	67,841	48,217	9,621
Total.....	2,943,435	3,058,615	114,801	9,621
Increase in 1869.....	.....	.....	105,180	.....
LEHIGH REGION.				
By Canal.....	909,000	1,050,659	141,659	.....
By Railroad.....	471,030	377,652	106,622	.....
SHAMOKIN REGION.	135,893	180,753	44,800	.....
WYOMING REGION.				
Canal, South.....	807,174	401,634	94,660	.....
Canal, North.....	39,256	51,914	12,658	.....
Penn. Coal Co.....	630,056	688,854	58,798	.....
Scranton, North.....	145,164	197,853	52,191	.....
Scranton, South.....	538,246	632,000	193,823	.....
Del. & Hudson Co.....	142,749	591,000	342,211	.....
Litch. & Blooms. R.....	40,253	89,000	39,747	.....
Col. Coal & Iron Co.....	16,541	17,000	459	.....
Total.....	6,524,838	7,517,516	992,678	.....
Increase.....	.....	6,524,838	.....	.....
Total.....	.....	992,678	.....	.....

Semi-Anthracite.			
Trevorton.....	106,686	124,290	17,604
Lykens Valley Co.....	72,098	67,564	4,534
St. Mt. Company.....	55,447	71,148	15,701
Broad Top.....	105,478	139,595	25,117
Total.....	340,009	333,597	58,492
			4,834

Bituminous.			
Cumberland Coal.....	646,650	697,466	47,810
Imported.....	259,385	281,208	21,323
Total.....	1,249,550	1,372,271	122,721
		1,249,550	721

Add Anthracite.....	122,721
Increase of all kinds.....	992,678
Total.....	1,115,399

From this table it appears that the whole quantity sent to market amounted

In 1859 to.....8,889,787 tons.
In 1858 to.....7,774,388 "

Total increase in 1859.....1,115,399 "

Of which anthracite.....992,678
Other kinds.....122,721

1,115,899 tons.

The increase from the anthracite regions was furnished as follows:

From the Schuylkill region.....	105,180 tons.
Lehigh region.....	177,182 "
Shamokin.....	44,860 "
Wyoming Basin.....	675,456 "

Total increase in 1859.....992,678 "

Of the amount sent to market in 1859 there were

Anthracite.....	7,515,516
Other kinds.....	1,872,371

Of the whole supply of anthracite:

Schuylkill County furnished.....	3,048,615
The other regions.....	4,468,901

Total.....7,517,516

THE ANTHRACITE COAL FIELDS.

The first or southern coal district, embracing the Schuylkill, Pinegrove, and Lykens Valley regions, contains.....75,920 acres.
The second or middle coal field, comprising the Lehigh, Shamokin, and Trevorton regions, contain.....83,525 acres.
The third, or northern coal field, comprising the Wyoming Basin, contains.....76,805 acres.

Total.....236,289 acres.

From these regions there were sent to market in 1859 the following quantity of coal:

	1859.	1858.	In. 1859.
First district.....	3,245,248	3,131,687	613,561
Second district.....	1,861,935	1,552,965	368,990
Third district.....	2,731,236	2,135,224	596,012
	7,838,439	6,812,767	1,018,563
	6,819,876 tons.		

Inc. in these dist's. 1,010,563

It is said that the interest of Mr. Winans, of Baltimore, in the railroad from St. Petersburg to Moscow, is the principal obstacle to its purchase by the Rothschilds from the Russian Government. The road cost \$100,000,000, beside the permanent lien which Mr. Winans has on it, and the Government has offered to sell it for \$60,000,000.

INDIANAPOLIS AND CINCINNATI.—The freight receipts of this road for the third week of January will be \$7,000 against \$3,205 in 1858, an increase of about four thousand dollars.

In the State of Indiana the total length of roads is 3,500 miles; completed 2,752, at a cost of \$127,720,000.

STEBENVILLE & INDIANA R. R.

The following statements are condensed from the monthly reports of the Receiver—Thos. L. Jewett—for the Pittsburg, Columbus and Cincinnati Railroad Company, made to the Court of Harrison County, Ohio, in obedience to the order of said Court, appointing him Receiver:

SEPTEMBER.

EARNINGS.

From Freight.....	\$15,734 78
" Passengers.....	13,710 89
" Mails.....	745 00
" Express.....	1,180 28
Total Earnings for September.....	31,370 95

EXPENSES.

For Motive Power.....	\$7,385 18
For Maintenance of Way.....	12,379 83
For Conducting Transportation.....	5,633 04
For Maintenance of Cars.....	1,534 04
For Construction and Equipment.....	1,700 88
Total Expenses for September.....	28,632 97

Among the extraordinary expenses for this month were the following: For renewing Bridges, \$3,668 27; for Arching Tunnel, \$3,066 58, and for new Cross Ties, \$1,680 65.

OCTOBER.	
EARNINGS.	
From Freights.....	\$13,450 31
" Passengers.....	11,845 31
" Mails.....	745 00
" Express.....	1,035 65
Total Earnings.....	27,075 77

EXPENSES.	
For Motive Power.....	\$7,532 30
For Maintenance of Way.....	12,638 33
For Conducting Transportation.....	5,662 65
For Maintenance of Cars.....	1,816 75
For Construction and Equipment.....	692 47
Total Expenses.....	28,542 50

The following items constitute a part of the expenses of this month, to-wit: Arching Tunnel, \$6,087 42—Renewing Bridges, \$1,417 45—and New Cross Ties, \$1,029.

NOVEMBER.	
EARNINGS.	
From Freights.....	\$15,343 90
" Passengers.....	9,131 52
" Mails.....	745 00
" Express.....	947 11
Total Earnings.....	26,166 93

EXPENSES.	
For Motive Power.....	\$7,341 15
For Maintenance of Way.....	10,553 67
For Conducting Transportation.....	5,916 11
For Maintenance of Cars.....	1,131 79
For Construction and Equipment.....	1,131 79
Total Expenses.....	27,032 04

Items of extraordinary Expenses in this month are—for Arching Tunnel, \$5,419 50; for Renewing Bridges, \$978 39, and for New Cross Ties, \$441 85.

It is proper to add to this report, that prior to the appointment of the Receiver, the Company had decided upon the erection of a Telegraph Line between Steubenville and Columbus; and had partly completed the same. To render that which had been done of value to the Company, as well as the great facilities it would give for the transaction of the Company's business, the Receiver determined to complete it. The whole work was done by the Company's employees, costing say \$15,000; about one half of which has been expended since the first day of September last. This expenditure should have been placed under the head of extraordinary expenses, reducing the current expenses of each month, about \$2,000.

Condition of the Commercial Bank of Kentucky and Branches on the 31st December, 1859.

RESOURCES.	
Notes discounted.....	\$288,103 67
BILLS OF EXCHANGE.	
Maturing South.....	\$902,530 10
" East.....	515,426 83
" West and in Kentucky..	538,257 41
Bonds of the city of Paducah.....	1,956,214 34
Protest account.....	25,000 00
Due from banks.....	3 65
Due from suspended debts.....	66,366 44
Due from same in suit.....	15,878 00
Due from real estate in banking houses.....	8,290 00
Due from same for debt.....	51,833 25
Due from funds in transitu.....	11,788 97
CASH MEANS.	18,228 97
In gold and silver.....	\$556,192 87
In other bank notes.....	27,774 00
On deposit in New York and Baltimore.....	193,145 14
	777,112 01
	\$3,218,718 26

LIABILITIES.	
Capital Stock.....	\$1,100,000
Amount paid in.....	\$1,094,625 00
Circulation.....	1,645,228 80
Individual depositors.....	242,288 79
Due to Banks.....	112,011 58
Due to dividend account.....	734 07

Due to contingent fund.....	10,946 25
Due to profit and loss.....	112,784 57
	\$3,218,718 26

Profit and Loss and contingent as above..... \$123,830 82
Deduct dividend No. 14, of 5 per cent., as declared this day.... 53,933 55

Leaves contingent fund and profit and loss this day..... \$69,897 27
JAS. L. DALLAM, Cashier.

FREIGHT RATES FROM CHICAGO EASTWARD.—The New York and Erie, in connection with the Michigan Southern Railroad, publish the following through rates for 1860, on eastward-bound freight, from date until changed:

Rates of Transportation on Eastward-bound Freight, via Buffalo, Dunkirk and Detroit.

Chicago, Chicago Junction, or LaPorte	First Class, Per 100 lbs.	Second Class, Per 100 lbs.	Third Class, Per 100 lbs.	Fourth Class, Per 100 lbs.	In lots of 50 bbls. and over.	Dressed Hogs, Flour, and over.
To N. York, all rail.....	1 60	1 25	95	65	1 30	1 00
To Boston, all rail.....	1 70	1 33	1 00	70	1 40	1 10
To Dunkirk, all rail.....						
for N.Y. & E. R. R.....	84	67	50	38	70	55
For Providence, R. I., all railroad.....	1 23	1 70	1 00	70	1 59	1 10
To Pittsburgh.....	80	55	45	38	70	

The Pittsburgh, Fort Wayne and Chicago Railroad Company publishes the following tariff and eastward classification for 1860, between Chicago and New York, Boston, Philadelphia, Baltimore and all Eastern cities:

From Chicago to	1st class, per 100 lbs.	2d class, per 100 lbs.	3d class, per 100 lbs.	4th class, per 100 lbs.	5th class, per 100 lbs.	6th class, per 100 lbs.	7th class, per 100 lbs.	8th class, per 100 lbs.	9th class, per 100 lbs.	10th class, per 100 lbs.
Boston, all rail.....	1 70	1 33	1 00	70	1 00	1 10	1 10	1 10	1 10	1 10
" water from Phil. 100	1 23	92	65	1 30	1 10	1 10	1 10	1 10	1 10	1 10
N. York, all rail.....	1 76	1 25	75	65	1 30	1 00	1 00	1 00	1 00	1 00
Philadelphia, all rail.....	1 48	1 14	87	60	1 20	90	90	90	90	90
Baltimore, all rail.....	1 48	1 15	87	60	1 20	90	90	90	90	90
Pittsburg, all rail.....	89	35	46	38	70	55	55	55	55	55
Cincinnati, O., all r.....	75	60	50	40	60	35	60	30	55	60
Columbus, O., all r.....	65	55	43	38	60	30	55	30	60	60
Dayton, O., all r.....	79	50	45	35	55	30	60	30	60	60
Cleveland, O., all r.....	60	50	40	30	55	30	60	30	60	60
Buffalo, N.Y., all r.....	85	67	50	38	70	55	55	55	55	55
Albany or Troy, do. 1.....	55	1 21	85	65	1 30	1 00	1 00	1 00	1 00	1 00
Worcester, Mass., do. 1.....	80	1 33	1 00	70	1 46	1 00	1 00	1 00	1 00	1 00
Hartford, Conn., do. 1.....	70	1 33	1 00	70	1 40	1 10	1 10	1 10	1 10	1 10
Providence, R. I., do. 1.....	70	1 33	1 00	70	1 40	1 10	1 10	1 10	1 10	1 10

The Illinois Central carry freights from Chicago to New Orleans, as follows: Flour, \$1 per barrel; beef or pork, \$1 65 per barrel. For first class freight, \$1 per 100 pounds; second class, 75c. per 100 pounds; third class 60c. per 109 pounds. Whitefish, \$1 60 per barrel; half barrel, do., at 80 cents. This includes all charges from Chicago.

TO CONTRACTORS.

LOUISVILLE & FRANKFORT & LEX. & FRANKFORT RAILROADS.

Proposals for the delivery of 50,000 White Oak Cross Ties at Louisville, Ky., within the Spring and Summer of 1860, are solicited till February 10, proximo. The specifications will require them to be counterbored to exact dimensions of 5x10 and 5x12 inches and 8 feet long. Parties desiring to furnish any portion or the whole, will please address the undersigned at Louisville, Ky., who will furnish any further information.

Jy. 26 to Feb. 10. SAMUEL GILL, Superintendent.

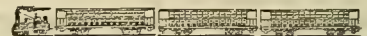
CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned THEODORE DRON, no 13 10 Wal. ar Broadway, New York

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
No. 67 West 6th St. bet Walnut & Vine
CINCINNATI O.

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANA OR SANDOVAL

FOR

Decatur, Springfield, Peoria, Quincy, Rock Island, Galena, St. Paul, and St. Anthony, and all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANA for all the above points. Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all TOWNS ON THE UPPER MISSISSIPPI

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

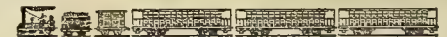
Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,
Gen'l Southern Agent, Cincinnati.
W. P. JOHNSON,
Gen'l Passenger Agent, Chicago.

Winter Arrangement, 1859-'60.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the West, South-West and North-West.

TWO TRAINS

Leave Wheeling daily at 12:35 P. M., and 10:10 P. M.

One Train leaves Parkersburg daily at 9:20 P. M.

Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City. Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2. Time as quick and Fare as low as by any other ROUTE.

Inquire for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

E. F. FULLER,
General Western Agent
L. M. COLE,
General Ticket Agent.
W. P. SMITH, Master Transportation.

PATENTED GAS WORKS OF THE

AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circular which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the repair is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet,.....	\$300 00
do do do 350 "	335 00
do do do 400 "	375 00
do do do 500 "	450 00
do do do 600 "	525 00
do do do 700 "	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, as now in operation in several States, apply to

R. T. COVERDALE,

107 Walnut Street, Cincinnati, Ohio,

who has the exclusive right to manufacture and sell in the State of Ohio.

Feb. 24th, 1859.

APPLEGATE & CO.,

Booksellers, Publishers, Stationers & Blank Book Manufacturers,

43 Main St. Cincinnati O.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Booksellers, Country merchants, Teachers, and others to our extensive stock of School, Classical, Theological, Scientific, Standard, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc., which, from our numerous and favorable arrangements with the principal manufacturers of Paper and Stationery, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

BOOKSELLERS,

Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, Envelope, Manilla, and Tea wrap-boards, Envelopes, Gold & steel Pens, Penholders, Copying Books, Ink and saucers, Sealing Slates, Mucilage, Book rests, Bill envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files; Date Calendars, together with all other articles used in the counting-house.

Stationers,

To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly paged, including all sizes, from the small memorandum to the large Super Royal and Imp-bound in a great and of superior workmanship. Books made to order of any size, with or without printed headings give satisfaction in quality of paper, accuracy of ruling and durability of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

BLANK BOOK MANUFACTURERS,

We are prepared to Print and Bind books in any style desired, at rates as low as quality of work cut in this where. Our executing these branches of the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and others wishing Bills of Lading, Railroad and Cards, Circulars, or other printing, will find that we do such orders despatch. Orders re-

Publishers

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, Clarke's Commentaries, Dick's Works, Rolin's Ancient History, Plutarch's Lives, Josephus, Spectator, Chain of Sacred Wonders, Familiar Science, Webb's Monitor, Soden's German, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, Books of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

43 MAIN STREET, CIN.

W. HARVEY'S SAFETY JOINT

For Coupling the Ends of "T" Rail
PATENTED, NOV. 2, 1858.

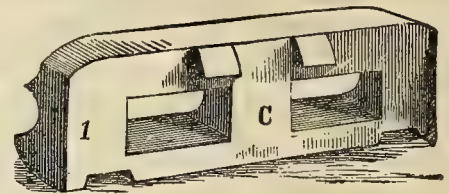


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

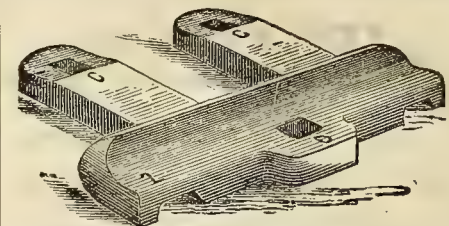
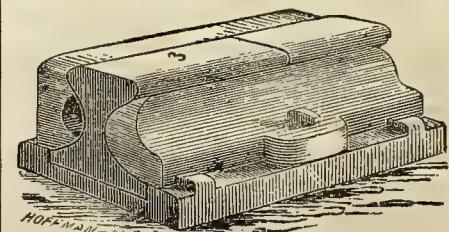


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other. One of the advantages of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered a vast improvement. It will be seen that one part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly safe road, thereby doing away with the breaking of rails, wheels and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
41 Jefferson street, Albany, N. Y.

PROSSER'S PATENT
ORIGINAL LAP-WELDED
IRON AND STEEL BOILER TUBES,
SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

SOLE IMPORTERS.
PROSSER'S PATENT SURFACE CON-
DENSERS for high pressure steam, with sea or other bad boiler water, gauges, 3-cutter drills, counter-sinks, tube end cutting bars, expanders, tube scalers, steel wire and whalebone brushes, pull lever wrenches, tubes—plain or enameled, screwed together for Artesian Wells, HOLLOW SLABS for various purposes, Steel for Rollers.
THOS. PROSSER & SON,
87 Jan. 28 Platt Street, New York.

G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

BUSH & LOBDELL,
Wilmington - - - - - Delaware
MANUFACTURERS OF

CHILLED WHEELS

AND
TIRES,
For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent
FOR THEIR

CELEBRATED WHEELS,
EITHER SINGLE OR DOUBLE PLATE,
WITH OR WITHOUT AXLES

WHEELS FITTED

To Hammered or Rolled Axles,

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

ad2

A Book for Every Business Man!
JUST PUBLISHED

—THE—

POST-OFFICE GUIDE!

For Post-Masters and Business Men.

CONTAINING

A Complete List of Post-Offices in the United States and Territories, arranged by States and Counties; A Complete List of all Distributing Post-Offices; Rates of Foreign and Domestic Letter Postage; Rates of Printed Matter, Transient and Regular; Abstract of the Laws and Regulations of the Post-Office Department, &c., &c.

COMPILED BY E. PENROSE JONES,

Late Assistant Post-Master at Cincinnati.

Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.

U. S. BLANK AGENCY, CINCINNATI POST-OFFICE,
January, 1859.

This work has been carefully compiled and corrected by E. PENROSE JONES, Esq., late Assistant Post-Master of the Cincinnati P. O., from the Records in this Department, and other sources, and contains the most complete list of Post-Offices, especially of the Western, North-Western, and South-Western States, yet published.

MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an actavo pamphlet of about 100 pages. The entire matter is kept standing in type, and as the compiler is promptly advised of all *New Offices, Changes and Regulations* of the Department, the information is corrected up to the last day of publication, an advantage possessed by no other work of the kind.

Observe, That this list is arranged by States and Counties, making it especially valuable to business men. No similar arrangement has been published since 1856. There are 3000 more offices in this than in any book heretofore issued. The Price is one-half that of any work of the kind now published.

If Single copies sent by mail (postage prepaid) to any address, upon receiving Twenty-five Cents in Silver or Postage Stamps. Five Copies sent for \$1.00, or Twelve Copies for \$2.00.

Address

C. S. WILLIAMS,
194 Walnut Street,
Cincinnati, Ohio.

Mar10th

WHEELER & WILSON'S



SEWING MACHINES.

W. M. SUMNER & CO., cor. Fourth and Walnut Streets, second floor, Cincinnati, Ohio.
BRANCH OFFICES:

Louisville, Ky., Columbus, O.,
Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being ALIKE on BOTH SIDES, impossible to ravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions, free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

If Send or call for a circular, containing all particulars, prices, testimonials, etc.

WM. SUMNER & CO.

1,200 Kegs No. 1 Railroad Spikes, 5 1/2 by 9-16th Corby, Gossin & Co.'s make, for sale very low by
TRABER & AUBERY,
7 Public Landing

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

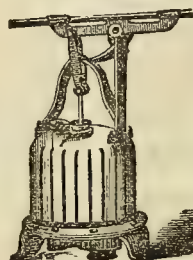
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine.



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use! and acknowledged by all who have used them to be perfect— are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and, for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded for the best Compound Steam Pumping Engine at the late Fair, Ohio Mechanics' Institute June 18, 1855 —1

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co., Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase
Ag. 4, m. 6.

FREEDOM IRON COMPANY,

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods,

Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't.

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works
June 9.

New Time Table

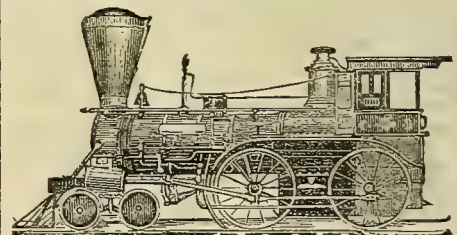
OF THE

NEW YORK CENTRAL R. R.



	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp..	7 00 A. M.	7 00 P. M.	7 00 P. M.
Mail.....	9 00 A. M.	12 50 A. M.	
New York Exp..	11 15 A. M.	9 00 P. M.	9 00 P. M.
Night Exp.....	5 00 P. M.	4 00 A. M.	4 00 A. M.
Utica Accom'n..	6 00 P. M.	Ar. U. 10 00 P. M.	
N. Y. Mail.....	11 15 P. M.	10 00 A. M.	10 00 A. M.
	Leave Buffalo.	Leave Bridge.	Ar. Albany
New York Exp..	5 15 A. M.	5 15 A. M.	3 30 P. M.
Steamboat Exp..	8 00 A. M.	8 00 A. M.	8 00 P. M.
Mail.....			2 30 P. M.
Cleveland Exp..	6 00 P. M.	6 00 P. M.	4 40 A. M.
Cincinnati Exp.	11 00 P. M.	11 00 P. M.	8 30 A. M.
Utica Accom'n..			10 00 A. M.

**CINCINNATI
LOCOMOTIVE WORKS.**



The undersigned are prepared to furnish Locomotives equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

20

MOORE & RICHARDSON.

**THE KENTUCKY
MILITARY INSTITUTE**

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges but more extended in Mathematics, Mechanics, Machines, Construction, Agricultural Chemistry and Mining Geology; also in English Literature, Historical Readings, and Modern Languages, accompanied by daily and regulated exercise.

Schools of Architecture, Engineering, Commerce, Medicine, and Law, admit of selecting studies to suit time means, and object of Professional preparation, both before and after graduating.

The twelfth annual term is now open. Charges, \$102 per half-yearly session, payable in advance.

Address the Superintendent, at "Military Institute Franklin Springs, Ky.," or the undersigned.

P. DUDLEY,
President of the Board

Jan,

The Railroad Record.

E. D. MANSFIELD,
T. WRIGHTSON. } Editors.

CINCINNATI:
Thursday Morning, Feb. 2, 1860.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

To subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.

One square, single insertion.....	\$1 00
“ “ per month.....	3 00
“ “ six months.....	12 00
“ “ per annum.....	24 00
“ column, single insertion.....	5 00
“ “ per month.....	10 00
“ “ six months.....	40 00
“ “ per annum.....	80 00
“ page, single insertion.....	15 00
“ “ per month.....	25 00
“ “ six months.....	110 00
“ “ per annum.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS.

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

THE European Agents for the *Railroad Record* are Messrs. FREDERIC ALGAR of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

RAILROAD MEETING AT AUGUSTA, GEO.—The *Augusta Chronicle*, of the 5th inst., says:

The call for a meeting of citizens at the City Hall last night, to take into consideration the project of building a railroad from Augusta to Macon or Columbus, was promptly and cordially responded to by a large and very respectable attendance, most of the business houses in the city being represented by their principals. Resolutions were adopted appointing committees to examine existing charters, and to ascertain what aid might be expected from Macon, Columbus and Charleston. Also, a resolution requesting the City Council, in accordance with the law, to take the direct sanction of the citizens to the subscription of \$500,000 toward building the road. The resolutions were passed with scarcely a dissenting voice, and the feeling exhibited was almost unanimous in favor of the project. The meeting adjourned, subject to the call of the Mayor.

The Cedar Falls and Minnesota Railroad Company has contracted with some Boston parties for building its road from Cedar Falls to Waverly, Bremer, Co., to be completed by Jan. 1, 1861, and the remainder before Jan. 1, 1863.

The railroad bridge connecting Galveston Island with the main land, is new, we learn, ready for the iron. The iron is laid most of the distance from Galveston city to the bridge. This bridge is over two miles in length.

WHAT IS THE PROPORTION OF DEBTS, TO THE PROPERTY OF THE PEOPLE?

This is certainly a curious problem, and, at first sight, seemingly impossible; for one may say, *how* is any one to tell how much A. and B. owes? We can not tell how much each individual owes, and it is of no great use to know that. It would only gratify an idle curiosity about our neighbor's affairs. But we can know with tolerable certainty, what are the debts of a civilized community, regulated as ours is, not the debts of the State merely, but the aggregate debts of individuals, corporations, and communities. *How?* Much easier than may be supposed. In his last report to the Legislature, the Commissioner of Statistics for Ohio, has done it with an approximation to the truth. Let us see how.

1. We know the State and Municipality debts with accuracy.

2. The great body of loans are recorded, and the Commissioner has obtained an accurate statement of all the recorded debts; and ascertained that the average time in which they subsist, is a little more than *two years*. The record debts of two years, then, make up the whole debt of this description.

3. The judgments obtained by parties are also recorded, and the Commissioner has obtained them.

4. Nearly the whole debt due to banks is known. Some debt of this description is due out of the State, and may be estimated for.

5. The commercial debt, beyond those already mentioned, is easier ascertained than may be supposed. The value of *importations* can not be greater than that of the *exportations*. The last we know very nearly, and the Commissioner has reported in the Report of Statistics for 1858. It is also known that on an average, goods are bought on six months credit. The commercial debt outstanding, then, can not exceed *half* the value of exports. It is, probably, considerably less, for a large quantity of goods are bought for cash.

6. There is only remaining the private debts of individuals, aside from all business, which must necessarily be small.

7. One thing should be mentioned: that, when the entire debts of all individuals are taken into view, the *commercial debt* must be taken *twice*, for the debts of the *consumers*—that is *store-bills*—are about equal to the debts of the merchants. But, on the other hand, we must remember that both these classes of debts will be liquidated by the *same sum of money*; for, if the consumer pay A., the retailer, he will pay B., the wholesaler. Leaving that out of view, however, we have the whole debt of Ohio, standing very near the following amounts:

Debt of the State.....	\$16,000,000
Debt of cities and counties.....	15,000,000
Debt of Record (2 years).....	50,000,000
Debt of judgment.....	7,500,000
Debt of Railroad Companies.....	65,000,000
Debt to banks and brokers.....	25,000,000
Debts of foreign commerce.....	28,000,000
Debts of commerce.....	28,000,000
Private accommodation debts.....	5,000,000

Aggregate..... \$239,500,000

In 1858, the Commissioner of Statistics returned the aggregate of all these classes at \$233,000,000, and in 1859, at \$250,000,000. The above is, therefore, a very near estimate. But in looking to the obligation and burden of the people to pay all these debts, the Railroad debts should obviously be excluded, for these debts are only a lien on the *roads* themselves, and not on the general property of the people. Excluding these, and we have \$170,000,000 as the aggregate of all classes of debt due from the people. To estimate the proportion of these to the whole property of the State, we have the assessed value of all the property of the State, which will be, for the year 1860—

In round numbers.....	\$900,000,000
The debts.....	170,000,000
Proportion.....	19 per cent.

It appears, then, from this statement, that *all the debts of all the people* amount to less than *one-fifth* the value of the whole property, and certainly this must be regarded as a small proportion. If a man of business, with a solid capital of \$20,000, owed but \$4,000, most assuredly he would regard himself as in a most safe and sound condition. Any capitalist would loan him double as much on his property. Indeed, it must be regarded as most extraordinary, that a State so young, and which has expended so much in public improvements as Ohio, should be so rich. It is now less than sixty years since Ohio was admitted to the Union, and the value of her property is now *nine hundred millions*, and the whole amount of debts (railroads and all) is less than two hundred and forty millions; and if we deduct from this half the commercial debt, (which we have taken twice over,) and the railroad debt, for which the roads only are responsible—we shall have only *one hundred and fifty millions*. Five per cent. per annum on the property would pay this of in less than three years.

SOUTHERN PACIFIC R. R.

In a previous issue we mentioned the fact that J. Edgar Thomson of the Pennsylvania Central Railroad, had finally accepted the Presidency of this company, and connected himself with its future destinies. From the interest we have hitherto taken in anything relating to a railroad across the continent, our readers have a right to expect of us more than a passing notice of this change in the Presidency of this work, and we wish we were able to give them a full digest of the present views and intentions of the Board, but in the absence of this, we deem it proper to lay before them such information as we have. The work now before us we have always regarded as one of the highest importance. It occupies one of

the two possible routes across the continent, and from considerations of distance, grades, and climate, the most practicable of these two routes. So long as a company was in existence possessing a valuable charter with ample land grants and liberal privileges, it was not very likely that any other company would make any real effort to undertake this gigantic task. The amount of capital to be risked, the obstacles to be overcome, and extent of the enterprise are too enormous to admit of competition, and a company once fairly in the field may safely reckon on having distanced all competitors. That would have been the case with this company long ago, but for unfortunate difficulties which arose in its management, and we now regard the election of Mr. Thomson and his acceptance of the position, as a guarantee that such difficulties are now over, and a pledge to the public of energy and success. In this undertaking Mr. Thomson has our heartiest wishes for his success. We understand that Mr. Thomson's election inaugurates a new policy for the company, and that it is intended to begin work on the Pacific side, and thus build from both ends. We can not overrate the importance of this policy. By commencing at the port of Guaymas in Sonora, and building up toward Tubac the branch road for heavy freight, the company would soon secure a paying road at the west end. The distance between these points is in the neighborhood of 350 miles, and over a country of light grades and favorable for building. But little grading or bridging would be required, while the road would pass through the most populous part of Sonora, and thus secure a local trade. When completed to Tubac it strikes one of the richest mining regions in the world. The carrying of merchandise and provisions from the coast to the mines with return freights of silver, copper, and lead, both as metals and ores would furnish a permanent, regular and lucrative business. With facilities extended by a railroad the business of mining would become more prosperous, and the whole country be more rapidly developed. A military and post road of no small importance to the country would be established, that could be relied on in times of war as well as peace, and a saving equal to one half the interest at 6 per cent on the cost of the road would be realized to the government, in the transportation of mails, troops, and munitions of war, that have necessarily to go to the region of country through which this road passes.

It would break up the strength and power of the organized and roving set of cut-throat bandits, sometimes pitied as the "poor Indian." The bold Comanche and the dispicable, cowardly and thieving Apache would melt away like the morning dew, and valuable farms and ranches with their thousand cattle would occupy the now deserted and unsafe beauty spots of this portion of our country. The expenses

of two Utah wars (with nobody hurt) would build it, and it would develop an amount of mineral wealth along its line, the annual product of which would build two such roads. These are facts that in any other country but this would not fail to attract attention.

There are also other considerations, that gives an importance to this enterprise superior to any other to which the attention of the American public is at present drawn. The increasing social and commercial intercourse of the Pacific slope with the Atlantic States, and the absolute necessity of it in case of war with any powerful foreign country. There is scarcely a family in the older States that has not a "loved one" that has gone to the "setting sun," and loud and deep would be the curses on the negligence and lack of foresight on the part of the government to provide the means of defence to those young and weak, though vigorous and brilliant sisters of our confederacy in case of war.

SALE OF THE MARIETTA R. R.

It seems, from the proceedings in Court, that the creditors and managers of the Marietta Railroad, have made some arrangement by which the road may be relieved from its embarrassments. We hope this is so. This Road is one of the most worthy enterprises of our country; but has labored under great and extraordinary difficulties. We can not see, that either stockholders, managers, or creditors have been much to blame in its misfortunes. Had the crisis of 1857 come one year later, in all probability, the road would have been free from all embarrassments, if not profitable. The fact is, the road had to go into operation, altogether incomplete, and therefore, unable to do the work it was intended to do. It had little or no opportunity of developing itself. It is only just now that it is completing a rail connection with the Virginia Road. Till that was done, it was useless to contend with the other great lines to the East, or with the Wheeling branch.

Under the order of Court, a sale of the Road is to be made in a few weeks, which, we understand, is managed in a way satisfactory to all parties.

In the meanwhile, there is some doubt, whether a sale of the Corporate Franchises can really be made under a Mortgage. To remedy that, there is a bill before the Legislature to enable the Company to make the sale, and the new parties to acquire title. It has passed one House, and probably will the other. If so, the sale will no doubt be completed, and all parties be satisfied.

The receipts of the Erie road for January show an increase of about \$100,000. The Receiver will in a short time, be prepared to pay the interest on the second mortgages.

STATISTICS OF DEBT.

We publish from the Report of the Commissioner of Statistics, for the State of Ohio, the following Table of Mortgage Debts, in each County of this State.

COUNTIES.	Number of Deeds and Leases.	Number of Mortgages & other Liens.	Amount of Money Secured by Mortgage.
Adams.....	301	12	\$ 99,728
Allen.....	640	175	103,680
Ashland.....	366	204	210,405 96
Ashtabula.....	726	346	226,401 41
Athens.....	386	241	181,673 03
Auglaize.....	659	189	135,350
Belmont.....	753	300	272,518
Brown.....	.....	.....	.....
Butler.....	1,088	542	783,147
Carroll.....	420	130	113,329 73
Champaign.....	766	273	375,448
Clark.....	279	353	378,476
Clermont.....	975	390	412,364 50
Clinton.....	639	183	273,697
Columbiana.....	906	453	364,548
Coshocton.....	499	170	187,049
Crawford.....	852	355	312,616
Cuyahoga.....	1,593	2,322	1,518,459
Darke.....	881	373	214,539
Defiance.....	352	70	75,772
Delaware.....	863	366	312,553
Erie.....	852	438	400,187
Fairfield.....	690	271	397,200
Fayette.....	326	118	195,027
Franklin.....	1,500	909	1,029,124
Fulton.....	450	144	62,663 39
Gallia.....	583	180	101,289
Geauga.....	604	208	209,504
Greene.....	689	...	520,570
Guernsey.....	662	150	98,714
Hamilton.....	4,560	2,456	6,642,225 40
Hancock.....	850	367	197,282 12
Hardin.....	361	229	158,911 64
Harrison.....	326	118	179,131
Henry.....	261	114	57,495
Highland.....	848	259	254,720
Hocking.....	266	123	83,304 43
Holmes.....	533	124	113,398 11
Huron.....	740	316	362,306
Jackson.....	444	184	244,013
Jefferson.....	482	246	347,405
Knox.....	790	316	392,910 73
Lake.....	581	249	236,770 86
Lawrence.....	...	...	...
Licking.....	1,017	...	463,316
Logan.....	811	291	245,562 74
Lorain.....	1,074	387	308,946
Lucas.....	823	351	658,000
Madison.....	191	121	235,734
Mahoning.....	578	157	126,154
Marion.....	441	187	176,596
Medina.....	757	286	298,681
Meigs.....	624	163	137,551
Mercer.....	608	180	65,636
Miami.....	965	409	423,779
Monroe.....	575	394	65,806
Montgomery.....	1,615	878	1,020,316 59
Morgan.....	572	173	160,907
Morrow.....	674	218	215,549
Muskingum.....	1,115	404	358,254
Noble.....	577	140	63,764
Ottawa.....	182	75	53,028
Paulding.....	...	...	...
Perry.....	455	187	156,458
Pickaway.....	540	168	228,244
Pike.....	366	78	72,811
Portage.....	843	292	293,472
Preble.....	677	236	277,565
Putnam.....	519	125	62,635
Richland.....	929	307	225,554
Ross.....	829	335	493,390 58
Sandusky.....	746	325	274,866
Scioto.....	627	283	233,395
Seneca.....	1,024	...	346,712 40
Shelby.....	600	250	...
Stark.....	1,151	442	961,038 94
Summit.....	1,085	331	370,800
Trumbull.....	963	303	240,739 10
Tuscarawas.....	259	365	319,878 58
Union.....	432	148	145,591 57
Vanwert.....	500	126	61,580
Vinton.....	353	130	62,400
Warren.....	776	376	582,803
Washington.....	...	...	...
Wayne.....	267	285	315,135
Williams.....	267	212	85,368 04
Wood.....	713	296	190,701
Wyandot.....	240	200	200,016

CLEVELAND, ZANESVILLE AND CINCINNATI R. R.—At the annual meeting of the stockholders of the Cleveland, Zanesville and Cincinnati Railroad Company, held at Akron on the 11th inst., the following named persons were elected Directors, viz.: Simon Perkins, J. D. Commins, M. W. Henry, D. L. King, Akron; A. W. Bliss, Northfield; E. B. Ellsworth, Hudson; R. R. Enos, Millersburgh. Officers elected—Simon Perkins, *President* and *Superintendent*; E. Mize, *Secretary*.

CLEVELAND & MAHONING R. R.

PRESIDENT'S REPORT.

The Directors of your road have but to invite your attention to the report of Sup't Rhodes, herewith submitted, to give you all the information in their possession, touching the operation and affairs of the road and Company for the past year.

By our direction, for the purpose of comparison, Mr. Rhodes has given in detail, the operations of 1858, as well as 1859. It will be seen, from this comparative statement, that in every item or particular, there has been a handsome increase of business and revenue. This, the Board are confident, will continue to be the case from year to year, so long as the road may have an existence.

In this connection, it may not be amiss to state for the benefit of stockholders residing out of the Mahoning valley, that the erection of four blast furnaces have been commenced on the line of the road, within the past year. One of these (at Niles,) went into blast in October last; one at Brier Hill, on the 20th inst.; another at Youngstown, will be started in a few days; and the fourth, at Mineral Ridge, will start early in the Spring. These furnaces, with the others now in full and successful operation, (six in number,) all using freely of the Lake ores, will give about all the back freight now required for the cars transporting coal to the Lake. The furnaces now in operation will soon demonstrate that the Mahoning valley, from the superior quality of the coal found there in great abundance, is among the best, if not the very best location in the United States, for the manufacture of iron. Hence, we may expect a steady increase in this branch of business, until the iron and coal trade alone will furnish a business sufficient in amount to sustain our road.

It will be seen by the Superintendent's report, that the receipts from coal for 1859, are not increased in proportion to the increase of quantity carried. This arises, in part, from a reduction in price on through coal, and in part from the fact that a large portion of this increase is in way coal, or to stations short of Cleveland. This increase in way coal is a gratifying feature in our trade, for it demonstrates a general improvement and prosperity of the country through which we pass. The transportation of ore, other than Lake, and of limestone, it will be seen, is a new item of freight within the past year. This traffic will steadily increase in amount, and will soon become a source of considerable revenue to us.

It will also be seen that our travel and miscellaneous freights are both steadily and handsomely increasing.

The decrease in the item of mail services arises simply from an overcharge in 1858, and not from any reduction in the price agreed to be paid by the Post Office Department.

The Directors flatter themselves that the operating expenses for the year, will come far within the expectations of the stockholders. Indeed, great credit is due to the Superintendent and Master Mechanic, for the vigilance, care and industry they have bestowed in their attention to this subject. They have wisely determined that true economy dictated that every thing be kept in perfect order. They have spared neither labor nor money to do this, and hence, have worked the road at the remarkably low figure of 36.7-100 per cent. of the earnings.

It is proper, in this connection, that we advise you that the road is in better condition now than ever before, and the rolling stock as good as at the commencement of the year.

Lest the item of "salaries and office expenses," amounting to \$9,738 5-100, may appear high, it may be proper to state that it embraces the salaries of Superintendent, Secretary and Treasurer, Clerk in office, Master Mechanic and Clerk, Engineer, Philadelphia Agent, Traveling Expenses, Stationery, &c., &c. Neither the President nor any of the Directors have made any charge for their services.

The legal expenses are unusually high, arising mainly from the fact that the trial or hearing of the cases involving our title to what is known as the "Bath St. property," in Cleveland, and our right to the use of South street, in Warren, took place within the last year. Neither of the cases are fully determined as yet, but the charges, so far as legal expenses are concerned, are mainly defrayed.

The Bath street property embraces but a small portion of our river front. Our solicitors are sanguine that the decision of the court will be in our favor.

It will be seen that the receipts, after deducting operating expenses for the past year, amount to \$182,282 96, which has been used and disposed of as follows:

Paid taxes.....	\$4,212 95
Paid coupons on 1st, 2d and 3d Mortgage Bonds.....	77,749 00
Paid for construction, (which includes new sidings, extensions of old sidings, cattle guards, fencing, covering bridges, &c.).....	13,297 01 95,259 96
	\$87,023 00

And this balance has been applied to the payment of interest on, and reduction of floating debt.

The Directors regret that the interests of individuals who are the indorsers for the company on a large portion of the floating debt, forbids the publication to the world, at this time, of its condition. They are glad to know that these friends of the company are abundantly secured with assets of the company, consisting mainly of 3d Mortgage Bonds, which, when disposed of, will far more than wipe out the floating debt. When this disposition can be made to advantage, is, of course, to some extent, uncertain. We must look to capitalists along the line of the road alone for purchasers,

and unfortunately for us, the frosts of the past summer having, to a great extent, destroyed our crops, and thereby created an unusual demand for money for the purchase of grain from distant points, we can not, at this time, hope to find purchasers for them.

As our road passes through a rich and highly cultivated farming country, a good general crop is alone wanted to create a demand for good securities. That our 3d mortgage bonds will take this rank, it is only necessary to state that our total mortgage debt, when the bonds shall all have been issued, will only amount to \$2,000,000, to wit:

First Mortgage.....	\$850,000
Second ".....	500,000
Third ".....	650,000
	\$2,000,000 00
The annual interest on this sum is.....	14,000 00
The net earnings the past year have been.....	182,282 96

Leaving from the past year's net earnings... \$42,285 96 To be applied to a sinking fund for the redemption of the principal. Should we then have a good crop the present year, we are not without hope that the managers of the company, in their next annual report, may be able to announce to the stockholders that the floating debt of the company is entirely removed and paid off, and that thereafter small dividends on the stock may be expected.

It affords the Board pleasure to bear testimony to the faithfulness of all the employees of the road. They have all, by their energy, industry, economy and care, won not only the confidence and respect of the Board, but also of the stockholders with whom they have come in contact.

To the extreme care of the Superintendent, Master Mechanic, Road Master, Conductors, Engineers and Brakemen, we are indebted for being able to announce the gratifying fact that we have passed through more than three and a half years without injury of any kind to any patron of the road.

By order of the Board of Directors,

DAVID TOD, President.

SUPERINTENDENT'S REPORT.

SUP'T'S OFFICE, CLEVELAND & MAHONING R. R., }
Cleveland, Jan. 10th, 1859. }

HON. DAVID TOD, Pres't.

SIR—Annexed I hand you condensed statement of the operations of the road for the year 1859.

The income and expense accounts are as follows, to wit:

RECEIPTS.	
Passenger.....	\$46,882 83
Express.....	1,369 90
Freight.....	117,242 45
Coal.....	114,126 02
Mail.....	2,870 53
Sale of old materials.....	2,638 83
	\$285,140 56
OPERATING EXPENSES.	
Repairs of	
Track.....	\$23,535 44
Bridges.....	2,414 76
Docks.....	430 72
Buildings.....	13 75
Fences.....	80 31
Shops.....	550 30
Engines.....	7,655 47
Passenger and baggage cars.....	1,559 83
Freight and coal cars.....	7,860 32
Gravel and hand cars.....	8 82

Running expenses of	
Passenger trains.....	3,452 83
Freight and coal trains.....	8,298 58
Damages to	
Persons.....	264 50
Stock.....	230 47
Freight.....	495 48
Conductors.....	2,049 24
Baggage and Brakemen.....	4,062 80
Station expenses.....	12,935 52
Salaries and office expenses.....	9,738 05
Legal expenses.....	3,757 72
Water Stations.....	1,014 47
Rents.....	2,516 95
Fuel.....	9,931 34
Balance, being net earnings.....	182,282 96

\$285,140 56

Length of road.....67 miles.

Miles run by

Passenger and freight trains.....	83,884
Coal and yard trains.....	82,553
Gravel and wood trains.....	17,536

Total mileage of all trains.....183,973

Gross earnings, per mile run.....	\$1 55
Operating expenses.....	55 9-10
Cost of fuel per mile run.....	5 4-10
Operating expenses, per centum of earnings....	36 7-100

Comparative business of 1858 and 1859.

Items.	1858.	1859.	Inc.	Dec.
Receipts from				
Passenger.....	\$42,385 86	46,882 83	4,496 97	
Express.....	982 12	1,369 90	387 78	
Freight.....	80,293 59	117,242 45	36,948 95	
Coal.....	105,501 54	114,136 02	8,634 48	
Mail.....	2,943 76	2,870 53		72 23
Old materials sold.....	2,175 26	2,638 83	463 57	
Total.....	\$234,282 04	285,140 56	50,931 75	73 23
Operating expenses.....	89,257 23	102,857 60	13,600 37	
Net earnings....	\$145,024 81	182,282 96	37,258 15	

Items.	1858.	1859.	Inc.
No. of passengers carried.....	55,938	61,180	5,242
Tons of coal.....	79,662	102,655	22,993
Tons of lake ore.....	18,471	26,085	7,614
Tons of other ore.....		4,955	4,955
Tons of lime stone.....		1,050	1,050

The rolling stock is all in good order, but has been insufficient for the convenient and economical transaction of business during a great portion of the year just closed.

The track was never in better condition than it is at the present time.

I take pleasure in saying that the employees of the company, generally, have shown commendable zeal in its service.

THE STATISTICS OF OHIO.

Climatology and Meteorology—Horticulture—Condition and Progress of Agriculture—Population—Mining and Manufactures—Commerce and Locomotion—Property, Debt and Taxation—Social Statistics—Marriages—Crimes and Casualties—Naturalization—Pauperism—Educational Matters.

REPORT OF E. D. MANSFIELD, ESQ., COMMISSIONER OF STATISTICS.

1. CLIMATOLOGY AND METEOROLOGY.—The subject of climatology becomes more and more interesting, as our observations extend. It is so intimately connected with all our vegetable productions, and therefore, with the wealth and prosperity of the State, that the changes of the atmosphere are observed with great care, and their result embrace most important consequences. Three or four winters since, intense frost killed many of the best fruit trees in the State. In the Spring of 1858, heavy rains nearly destroyed the oats, by causing rust, and reduced the corn crop by thirty millions of bushels. In the last summer an extraordinary frost reduced the wheat crop by many millions of bushels, besides severely injuring nearly all the growing vegetation. We can not prevent these calamities, but we can estimate the probabilities of their recurrence,

and determine, after a series of observations, on climate and agriculture, what may be fairly taken as an average, for either. For this purpose a constant observation of the phenomena, not merely of climate, but of vegetation, becomes necessary.

In the tables annexed will be found eight tables, made out by the most intelligent observers, upon the climate and meteorology of 1859. The points of observation were Cincinnati, Hillsborough, Bellefontaine, Mount Gilead, Marietta, Steubenville, Medina and Kelly's Island. These are sufficient to determine the general climate of the State for 1859, but I regret that I can present no detail for the north-western counties, for the frost which committed such ravages in two-thirds of the country, was comparatively harmless. Some of the climate phenomena of the last year were even more extraordinary than those of 1858 or of the cold winter preceding. They will be best exhibited by the practical observations of my correspondents. The most remarkable features of climate in 1859, were the frost, rain and drought.

Dr. I. P. Hildreth, of Marietta, one of the oldest citizens, and a scientific and most experienced observer, says: "The most striking and remarkable feature of the year has been in the destructive frost of the morning of the 5th of June, blasting and destroying thousands of acres of wheat in central and southern Ohio, after the heads were fully grown and much of the grain in milk. No similar disaster had fallen upon us since the settlement of Ohio in 1788. In 1834 destructive frosts took place in May, as late as from the 13th to the 18th day, six mornings in succession, destroying all the fruits and much corn and wheat. But, the wheat was then in blossom, and where not plowed up, in a great measure recovered by pushing up new roots from the uninjured roots and produced a fair crop. The corn was planted, and warm rains succeeding, the farmer was blessed with a fair return by the kind and loving favor of Him who has said, 'seed time and harvest shall not fail.' Even to this present year, where the fields were immediately replanted as late as the 10th of June, on rich and well cultivated soil, the crops of corn was really good. The apple and peach crops were in a great measure destroyed all over southern Ohio and the adjacent region. The fruit had acquired the size of an almond or nutmeg, and most orchards were filled abundantly. It was a serious loss, as the previous year had been unfruitful and no stores of dried apples were laid up by the farmers."

The following is a minute of the frosty seasons since the year 1815, which was the first year I lived in Wayne county, Ohio:

1815—The spring was wet and cold. The 22d day of April we had a tracking snow, (we hunted after deer.) It continued wet and cold till the 1st of June, (at that time we planted corn.) The remainder of the season, that is the summer and fall—were very agreeable.

1816—Which was called the cold summer—frost every month in the year. The astronomers discovered a dark spot on the sun. The ice mountains in Switzerland had more snow and frost melted from them that year than they had for a century, in any one year.

1817—The spring came in early and fine in every respect. Every thing looked prosperous till the morning of June the 1, when every thing—the leaves of the forest were all frozen. We had some reviving showers. Every thing took a second growth. We had half a crop of wheat. Oats and corn were good. Rye killed.

1824, May 20, 26—Hard frosts: not serious. 1834, May 14—Another hard frost, and the occurrences of the same as in 1817.

1845, May 11, 12, 16, 24, 28—There were frosts. Those of the 12th and 28th hurt the corn the most.

1859, June 5—The frost made almost a clear sweep of our harvest this time. It was so much the more destructive, on account of the grain being in blossom and past recovery.

It appears from this that late and hard frosts occur as often as once in eight or nine years, but that they are very destructive only at intervals of double that period. A continued series of observations for one or two centuries, accurately made, might show something of regularity in the periods of their regularity.

From the statement of observers, from whom letters have been received, (all of them experienced and careful persons) the following climate phenomena seem to be fully established.

1. That the frost on the 4th (morning of the 5th) of June, was the most extraordinary in intensity and effects, since the first settlement of the State.

2. That its effects were most disastrous, killing the fruit, (with little exception) destroying half the wheat crops, injuring corn, and doing more or less injury in two-thirds of the State.

3. That this frost was far less injurious in the extreme Northern and Southern parts of the State, the region affected being the entire center and much of the Southern part.

On the last head there are some facts of great interest. Taking the effect of the frost by its effect on the wheat crop, as a standard, it seems that the frost region (in regard to its effect on this State) may be regarded as circumscribed by a great ellipsis whose Western end, however, is smaller than the Eastern end. The Northern arc of the ellipsis seems to have rested on the gravel ridge near Lake Erie, but near Sandusky, diverging to the South, passing through Huron county to near the Western line of Hardin and Allen. This is proved by the fact that the Northern townships of Ash-tabula, Lake and Lorain, have much better wheat crops than the Southern part of the same counties; that Erie has an average crop, and the western counties a full crop.

The southern arc of the ellipsis rests on a line drawn on the north side of Butler, Union, Adams and Gallia, to Washington. The crops of Hamilton and Union, Adams and Gallia were good, while immediately north of these the destruction was general. I take, here, the wheat as a standard. Could we have had accurate observers of the phenomena of vegetation (which is the true climatic test), in the States east and west of us, (especially in Indiana and Pennsylvania), I have no doubt we could define quite accurately both the origin and nature of this frost storm. If we can get a large number of observers, and unite close observation on vegetation with the daily record of the wind, of the barometer, thermometer, and hygrometer, we shall in time, I have no doubt, ascertain the nature, if not the regular course of climatic changes, as we have those of gravitation and electricity.

In comparing the meteorological phenomena of 1859, with those of other years, the most striking and important point is that of rain, or rather "falling water," derived from both rain and snow. In six months of last year, from the 1st March to the 1st September, there fell ten inches more than the average amount of water. As the bulk of this rain fell in May and June, when fruit germs were

small and corn was to be planted, it did a great deal of damage. The comparison between the rain during those six months, for 1858 and 1859, is as follows:

RAIN AND MELTED SNOW.

	1858.	1859.
At Cincinnati (6 months).....	30.88 inches.	22.47 inches.
At Marietta.....	34.25 "	22.25 "
At Steubenville.....	29.04 "	27.44 "
Average of 6 months.....	31.39 "	24.05 "

It will be seen, that there is a great falling off in the amount of rain which fell in the growing season. The greatest amount fell in April, whereas last year in May and June. The distribution of rain in regard to seasons was much better, although the amount fallen is still above the average.

In regard to the locality of falling water, the case was very different, showing some extraordinary variations. The following are the amounts of rain and melted snow fallen at three parts of Ohio, distant from each other, 1858-9:

Bellefontaine.....	36.24 miles.
Marietta.....	53.91 "
Medina.....	25.57 "

It appears that the falling water at Medina was but one-half that at Marietta, and two-thirds that at Bellefontaine. This difference is no doubt caused in some degree by the height. The point of observation at Medina is 1,255 feet above tide water, while Marietta is about 600. This, however, can cause only a part of a difference so great. The fall of water at Marietta is above that of the average of the State, while that at Medina is below.

The following is a statement of the fall of water during the first eight months of the year 1859, at several points:

Cincinnati.....	30.96 inches.
Bellefontaine.....	26.66 "
Hillsborough.....	34.57 "
Union Village, (Warren Co.).....	31.37 "
Marietta.....	32.35 "
Steubenville.....	32.93 "
Medina.....	16.45 "

Thus we find that in the first eight months of 1859, the difference I have noted exists in the same degree. The fall of water at Medina is half that of Marietta. The fall of water at Bellefontaine is eight inches below that at Hillsborough, and Cincinnati below that at Marietta. The average is 29.32 inches. Cincinnati, Union Village, Hillsborough, Marietta and Steubenville rise above this. Three of these places are on the river and all lower in altitude than Bellefontaine and Medina. Observations have proved that at the same place, one-fourth more water falls at a point near the surface of the earth than at a point one hundred feet above it. Whether this be owing to winds or to a greater condensation near the surface of the earth, it certainly results in the fall of a greater amount of water at the lower points. I infer, therefore, (as I believe agricultural experience proves) that the upper part of the central plain of Ohio—that from which the streams commence their fall on the one hand to the lake, and on the other to the Ohio, is a comparatively dry country and best adapted to those plants which require more dryness. This may be a reason why, when a frost comes at an unusual period, as in June, it is more severe than it is near Lake Erie or the Ohio.

The climatology of 1859, for the State of Ohio, may be closed with recording what will be deemed both in experience and in meteorology the extraordinary month of December. In most years, December is a milder month than January, and not usually colder than February. Our winter, especially in the southern part of Ohio, seldom commences in

earnest until the middle or latter part of December. In the "old fashioned" seasons (as they are called) the Indian summer gradually declines into December, and winter comes on. This year, for the first time in several years, we had in October and November, a dull and beautiful Indian summer, a mild dry air, a hazy atmosphere, a late foliage, and the most agreeable temperature, affording all the charms which belong to a western Autumn. This season, however, instead of declining, gradually fell off suddenly into an early and severe winter.

"At present," says Mr. Buchanan, writing from Cincinnati, Dec. 8th, 1859, "we are in the midst of an early winter—snow three inches deep."

Dec. 6.	6 A. M.	Thermometer 50 deg. above zero.
" 7.	6 "	" 2 "
" 8.	6 "	" 5 " below "

I will add the following particulars from my own diary, made near Morrow, Warren co.

Dec. 8.	Sunrise.....	10 deg. below zero.
" 9.	".....	16 " above "
" 12.	".....	30 " " "
" 14.	".....	30 " " "
" 15.	".....	8 " " "
" 22.	9 P. M.....	14 " " "
" 23.	Sunrise.....	2 " below "
" 24.	9 P. M.....	14 " above "
" 24.	Sunrise.....	10 " " "
" 31.	".....	1 " below "
Jan. 1.	".....	6 " " "
" 2.	".....	8 " " "

In the middle of December, there were repeated snows, so that in the week previous to Christmas, there was very good sleighing for several days. Thus from the 7th December to the 3d January, the thermometer was below zero at sunrise of five different days. On the 3d inst., the ice on the Miami River was eight inches thick, solid and pure. Thus the old year closed and the new one began, amidst a severity of winter which has been only twice surpassed in many years, and never, I believe, at so early a period in the season.

I. HORTICULTURE.

The interest in Horticulture, and indeed the value of its products, have so greatly increased in Ohio, that I have thought best to place such facts as my correspondents furnish me with on this subject, under a distinct head. The most prominent topics of horticultural interest, are the grape, apple, peach, berries and melons, among fruits, and the finer vegetables and flowers. The products of these fruits and vegetables have recently become of much higher value and importance by the introduction of railroads. By the facilities thus furnished, the products of the northern and southern sections of the State, and beyond our borders to other States, are exchanged. The fruit of the southern part of Ohio is carried in large quantities to be sold in all the markets of the Lakes; and in turn, the later fruit of the Lake region is sent to the markets of Cincinnati. In the last season a striking illustration of this was found in the exportation of grapes from Cincinnati to the northern towns, and the importation of large quantities of apples from western New York.

Such information as I have on the horticulture of last year, I give below:

1. OF GRAPES.—Mr. Buchanan, one of the most experienced cultivators, says that "Grapes are a very good crop; the best since 1853; an average yield of 350 gallons of wine to an acre; from about 1,500 acres supposed to be in bearing in this (Hamilton) county. The quality of the grapes was remarkably excellent, berries large, abounding in juice and saccharine matter. Large quantities were sent to Northern, Eastern and Southern cities, and more sold in the Cincinnati market by fourfold than was ever sold in it before. The

average price was five to six cents per lb. by the quantity. Some mildew and rot appeared in the vineyards about the middle of June and July; but these diseases were checked by fine dry weather and high winds."

The year 1858, as stated in my last report, was the worst year for the vine we have experienced, but this year is the best since 1853. Every year since 1850 has augmented the number of acres of the vine culture. Supposing Mr. Buchanan's estimate of 1,500 acres for Hamilton county, to be correct, and adding to it the vineyards of Clermont, Brown, Adams, Kelly's Island and other localities, I estimate the number of acres in bearing in this State, to be 2,200. Taking an average of 250 gallons to an acre we have 770,000 gallons of wine as the product, but I do not suppose that more than 500,000 gallons of wine will be made. 1st, because the average of vineyards, especially those in the interior of the country, is not as high as those in the immediate vicinity of Cincinnati; and 2d, because a large quantity of grapes are now consumed as fruit. The consumption of grapes as fruit, is now as mentioned by Mr. Buchanan, rapidly extending, and when they are cheap, as they soon will be, grapes will be eaten as apples and peaches, and will be preserved by canning, as the peach now is. For this purpose, a greater variety of grape than we have heretofore had, is desirable. I observe that the horticultural societies of New York and Ohio have recommended several new species, but especially the Delaware grape, originating in this State.

In regard to the grapes, Kelly's Island has proved a remarkable locality. The vines flourish and bear fruits their when they fail in most other localities. This fact having been established, extensive vineyards are now planted there. The cause of this superiority of climate, for such it is, may perhaps be found in the following remark of Mr. G. C. Huntington: "You will observe some peculiarities in our climate, among which may be mentioned the almost perfect uniformity of temperature between 9 o'clock P. M. and 7 o'clock A. M. As a consequence, I suppose we have no dew during the summer, except in rare and exceptional cases." Unquestionably this is cause enough to show why there should be no mildew in summer.

2. OF PEACHES.—The experience of several years has proved that the peach is a very uncertain fruit as to bearing. It varies not only in different seasons, but in different localities. Neither 1858 nor 1859 were good peach years, but much the contrary. After the frost of June 5, it was scarcely probable there would be any peaches in Ohio; in fact nine-tenths of the expected crop was destroyed. Notwithstanding this, there were localities in Ohio, in which the orchards had a moderate amount of fruit. In the Cincinnati market, a fair test of this kind of fruit, peaches were brought from Manchester and Rockville, (Adams Co.,) though neither so good or so numerous as the year before. Some peaches were also brought from Clermont county, and some from Warren. The orchards of Warren county are very extensive, and never have entirely failed, in any year. In 1859, two or three large orchards bore well, and one in particular of fifteen acres, is estimated to have borne 2,500 bushels. Why a single spot like this one should have escaped all frosts, and borne a full crop, when no other did, is a problem for both horticulturists and philosophers.

The peach is now cultivated so extensively in the southern part of Ohio, that in a season of general bearing this fruit will be both abundant and cheap.

3. OF THE APPLE.—In the United States there is no fruit which in permanent value is equal to the apple. Many years since, it was more cultivated in Ohio than it now is. Not long since the markets of Cincinnati and the lower Ohio valley were mainly supplied from the orchards on the Ohio and Muskingum. Now the case is different. Either from neglect in planting orchards, or from the bad season of the last three or four years, comparatively few Ohio apples now appear in market. From the 1st September to 1st January—four months, 62,000 barrels of apples were imported into Cincinnati. Probably three-fourths of these were from Western New York, where this fruit is extensively and successfully cultivated. Recently the apple orchards have been more frequently set out in this State, but still the popular feeling in the Western and Southern part of the State runs in favor of peaches, pears and grapes. The extraordinary profits which have attended the peach and the grape in some instances, have caused horticulturists to turn their attention to them, but it is quite certain that the longer life, larger crops and more certainty in bearing, make the apple in a series of years the most profitable fruit which can be raised in this climate. At present, many of the old orchards are dying out. Mr. Arnold, of Darke county, says: "The old orchards of our county appear to be on the decline, quite a number of the trees dying. It is thought (and I believe) the cause is, mainly from the hard freezing during two or three of the last winters." This remark is probably correct, and will apply to many other counties in this State. The amount of destruction to fruit trees by the two cold winters, we can scarcely appreciate. A tolerably correct measure is found in the very high price of fruit since in all our markets. Had the numerous orchards and fruit gardens of this State borne such crops since as they did in previous years, no such prices as have been current would have existed.

In the N. E. part of this State, where the climate is similar to that of western N. Y., apples did better and were in some degree an exception to the general rule.

Upon the causes and results of the apple failure. I add the remarks of two well informed observers. Mr. C. Springer, of Muskingum, says: "The apple has so deteriorated for the last ten or twelve years, in central or southern Ohio, as scarcely to be worth cultivation for market purposes. They are subject to many diseases, and if you raise fair specimens, they will rot in the barrel. The cause seems to be more atmospheric than any thing else, for I have seen the fruit as much diseased on trees grown on the virgin soil as on older land. The peaches and apples were mainly killed by the June frost. I never had so fair a prospect for peaches before. They had weathered the rough, severe weather of the spring, but were all cooked up by the June frost. By the way it is not the frost that kills but the sun after the frost."

The following observations on the apple culture by Mr. Coolidge, of Lake county, may not be uninteresting: "The apple tree has regained its full strength and vigor. We have a very small crop near the Lake, of the largest and fairest fruit we ever had. It ripens very early and will be a poor keeper. Could we pursue our observations a thousand years, we could not create one new principle, but only be the better prepared to know and observe Nature's laws and draw valuable and interesting instruction therefrom. The present mode of improving our fruit in old orchards by grafting and pruning is in violation

of Nature's laws. It destroys the health and vigor of the tree, and it is short-lived. Hence the necessity of often renewing with young trees. The shape of the top of a bearing apple tree and the shape of the apple it bears will always correspond—thus a flat apple a flat top, a long apple a high-towering top. By observing this law of Nature in renewing old orchards by engrafting, the high top can be made low and the low exalted. Observation also teaches us, that apples grown upon light warm soil will be larger and will mature four weeks sooner than those of the same variety grown upon a heavy clay soil; but those grown upon clay soil will keep from four to six weeks longer in Spring. Hence the propriety of growing Fall apples upon sand and Winter apples upon clay."

Of other classes of fruit I have no definite information; cherries mainly shared the fate of apples. Pears and berries did much better.

OF THE GENERAL CONDITION AND PROGRESS OF AGRICULTURE.

In regard to the application of arts, culture and extent of land sown, Ohio has continued to progress during the last year, though by no means as rapidly as in some years previously. On the 1st June last, there was a much greater extent of land sown and in culture than at any former period. The results would probably have been unprecedented crops, but for the frosts of June 4th and 5th. The effects of this have been considered in the article on "Climatology." As to its final results on crops, there is one uniform testimony, that it was most disastrous in three-fourths of the State.

In 1858 I stated the crops to be below an average, and the same thing is undoubtedly true of this year. In order to show how accurate the deductions made from this testimony are, I make the following brief table of my estimates and the actual results:

	Estimates. Bushels.	Results. Bushels.
Wheat.....	18,000,000	17,655,483
Oats.....	5,000,000	8,026,251
Corn.....	55,000,000	50,863,582
Aggregate grain.....	78,000,000	76,745,316

In regard to Corn, I remarked that the summary of reports gave, two-thirds an average, which would be near 60,000,000, but as the falling off was chiefly in the large corn growing counties, the actual loss would probably be greater. So it was. The diminution from the year previous, was no less than 32,000,000 bushels.

In regard to oats, I estimated the loss on that crop (taking 20,000,000 as an average) at 15,000,000 bushels. In fact, however, the crop was 8,000,000, and the loss but 12,000,000 bushels. In the aggregate bushels of the grain crop, my estimates were very nearly correct. The general result of the crops of 1858 was that they did not reach two-thirds of the year previous, and that the three crops of wheat corn and oats fell 50,000,000 bushels short, which was fairly worth \$22,000,000.

In regard to the aggregate crop of 1859, it is better than in 1858, but is still short of a full crop. The main loss fell on wheat and hay. Oats and potatoes are a full crop. Corn is a fair one. That the crops of 1859 were not full in the aggregate, either in Ohio or adjoining States, is proved by an unfailing test. On the 1st January, 1860, the prices of all agricultural products were, on the whole, higher in Cincinnati than on the 1st of January, 1859, and much higher than in January, 1858. This took place, too, when the foreign

demand is not great, and the autumn had been extremely favorable for bringing forward the crops. A more particular view of the crops I shall now give, in an examination of each.

1. OF WHEAT.—I have shown heretofore the extreme variability of the total products, arising in a great measure from the great variety of diseases and dangers to which it is subject. In my report for 1857, I stated that "the total crop reached its greatest decline in 1854, and is now increasing. The crop of 1857 is probably greater than that of any year since 1852." This proved true. The crop was 25,397,614 bushels, being the largest since 1850. That, however, seemed to be the crisis. For two successive years it has again declined. The crop of 1858 was not three-fourths of the previous one, and that of 1859, probably not half. The successive waves of the wheat product will be seen in the following table of aggregates and averages for ten years:

	PRODUCT. Bushels.	AV. PER Bushels. ACRE.
1849.....	14,457,351	.....
1850.....	31,000,000	7.3
1851.....	25,309,265	15.2
1852.....	22,962,774	14.1
1853.....	17,118,311	19
1854.....	11,619,110	8
1855.....	19,569,320	13
1856.....	15,233,837	10
1857.....	25,397,614	.....
1858.....	17,644,483	10

From the above table it will be seen that the wheat crop of 1850 was double that of 1849, and nearly treble that of 1854. The above ten years are enough to determine what is called an "average," (a term which needs a more precise definition); and I find that the average quantity of wheat grain produced in Ohio is 20,075,000 bushels, and the average per acre 13 bushels. The quantity of land sown in wheat has varied from 1,400,000 to 1,700,000 acres. The crops of 1850-51-52 and '57, were the best ever grown, and were above the average, whilst the others were below. The crop of 1855 was very nearly an average for the last ten years. The quantity of land put in wheat diminished from 1850 to 1856, but has since increased. From present indications I should not estimate the crop of 1859 at more than twelve millions, or half that of 1854.

2. OF CORN.—The corn product has again obeyed the law which I noticed in my last report, of producing large and small crops in alternate years. Whatever may be the cause of this fact, it seems to go on with great regularity. In spite of the injury done by the early frost of 1857, the crop of that year reached 82,000,000 bushels. The next year, however, (1858) we find it falling to 50,000,000. In the last year, (1859) it has undoubtedly reached a much higher point, probably 75,000,000 or 80,000,000. The average of each two years is about 136,000,000 bushels. To make this up for the last two years, the crop of 1859 should be 86,000,000. It is probably not so much. The average per acre of corn is almost always exaggerated by those who speak of it. The crops of our little bottoms, in ordinary years, are taken as the standard, and people speak of 60 and 70 bushels of corn per acre as a common crop. So it is on the bottoms of the Miami and Scioto, but not half the lands planted in corn, are of that description. Against the large crops of alluvial lands must be set off, the products of the uplands scarcely more than half as much per acre; and against the good ground and cultivation of both, must be set the large quantity of inferior and poorly cultivated. Ohio has as little unproductive land proportionally, as any State in the Ame-

rican Union, yet she has much which is relatively inferior to the best class of lands. The average production of corn per acre for a series of years has been as follows:

1850.....	36.8 bushels.
1851.....	36.7 "
1852.....	33.6 "
1853.....	40 "
1854.....	26 "
1855.....	39.7 "
1856.....	27.7 "
1857.....	35.6 "
1858.....	37.7 "
Average of nine years.....	38.8 bushels per acre.

It will be seen that although five out of nine years were considerably above this average, yet the other four were so much below it as to bring them down. We could not have, perhaps, a stronger and more scientific proof of the extreme variableness and great vicissitudes of climate in the last five years, than in this great variation of the corn crops. Up to 1854 the corn plant was remarkably uniform in growth and product. In that year occurred a great and protracted drouth, which reduced the average for the State below that of any year we have experienced. Since that we have had two years of low average for corn. If the uniformity of climate should return for second years, corn will probably be produced to the extent of 100,000,000 bushels per annum.

3. OF OATS.—The law of 1858, in relation to statistics, provided that the Assessor should return the crops of oats and hay in the same manner as they have heretofore done those of wheat and corn. The act was passed so late that the assessor in the spring of 1858 returned but few counties. Nineteen counties returned 5,594,247 bushels grown on 171,010 acres, giving an average of 32.7 bushels to an acre. These counties contained less than one-fourth the surface, and less than one-fourth the population of the State. An estimate based on the data thus furnished, gave 26,572,674 bushels as the product of 1857. This may have been a little too large, but it will be entirely safe to say that the crop of that year was 25,000,000 bushels. In 1858 the falling off (caused mainly by rust) was most extraordinary, the crop reaching but 8,026,251 bushels grown on 669,647 acres, which is 12 bushels per acre. Taking the whole State, then, the product of 1858 was but 40 per cent. of that in 1857, but in a great majority of counties the falling off was much greater. There were twenty counties in the southern part of the State which did not bring five bushels to the acre.

We have now the statistics of four crops of Ohio in different periods, from which we may form some idea of what an average crop is. These compare:

1839.....	14,393,103 bushels.
1849.....	1,472,742 "
1857.....	25,000,000 "
1858.....	8,026,251 "

The average of the whole is 15,223,044 bushels. The average of the last two years is 16,513,125. Looking to the fact that the destruction of oats in 1858, was altogether unprecedented, and that, with the increase of population, the breadth of land sown is continually increasing, I think a fair estimate of the culture and product of oats, in this State, will for the future be 700,000 acres sown, producing 20,000,000 bushels, or rather less than 30 bushels per acre. In the year 1859, there were some parts of the State where the product exceeded 40 bushels per acre, hence I estimate the crop of 1859 as above the average. Looking now into the county returns for 1858, I find, as in the case of corn, some remarkable difference as to the localities. Below I give two tables, each containing fifteen counties,

one in the south and the other in the north of the State.

Counties.	Acres.	Crop.	Average. Bushels.
Hamilton.....	3,718	29,511	8
Butler.....	8,268	24,798	4½
Adams.....	5,155	24,280	4½
Brown.....	7,504	30,006	4
Clermont.....	10,240	44,658	4½
Highland.....	5,074	15,263	3
Lawrence.....	4,020	26,242	6½
Perry.....	7,300	26,930	3½
Pickaway.....	2,131	7,461	3½
Pike.....	4,339	14,154	3¼
Preble.....	5,956	45,291	8
Ross.....	4,570	20,725	4½
Scioto.....	5,494	11,478	2½
Vinton.....	4,324	9,383	2½
Union.....	9,118	41,964	4½

Fifteen Counties.....	87,109	381,134	4½
Ashland.....	13,858	283,465	21
Carroll.....	13,468	210,739	15½
Columbiana.....	15,154	289,802	19 1-14
Harrison.....	11,026	159,240	14½
Mahoning.....	10,908	237,236	21 4-5
Medina.....	9,774	188,731	20½
Holmes.....	12,932	195,085	15 1-10
Jefferson.....	11,757	206,760	17½
Richland.....	19,367	363,317	18 7-9
Stark.....	19,493	438,644	22½
Summit.....	9,783	207,033	21 1-9
Seneca.....	14,946	245,979	16½
Trumbull.....	9,314	176,635	18 9-10
Tuscarawas.....	17,632	258,230	14 11-17
Wayne.....	19,464	444,204	22 2-9

Fifteen counties.....208,876 3,905,099 18 7-10

1. OF HAY.—The quantity of hay, like that of oats, was first fully determined in 1858. But of the crop of 1857, there were nineteen counties returned to me, which being in different parts of the State, were sufficient to make a very correct estimate for the whole. The result was:

Acres of meadow.....	1,250,000
Tons of hay.....	1,701,245
Tons per acre.....	1.36

The crop of 1858, as was ascertained by the assessors (and which was a full average,) amounted to:

Acres of meadow.....	1,357,874
Tons of hay.....	1,806,461
Average per acre.....	1.33

We have four crops in twenty years, from which we may estimate averages and determine the annual production of the State. The crops of hay were:

In 1839.....	1,022,037 tons.
In 1849.....	1,443,142 "
In 1857.....	1,701,245 "
In 1858.....	1,806,461 "

It will be seen from this statement that the advance in the cultivation of meadow land is 80 per cent. since 1839.

In looking to the sections where meadow land is most abundant, I find it is where there are most animals kept, but more particularly sheep and milch cows. These animals are not sent to market as fat cattle and hogs are, but are sustained throughout the year, which can be best done by hay and pasturage. Hence we find much the largest portion of hay raised in the north eastern part of the State, where wool is grown and dairy products raised most extensively. The following table exhibits the counties in which the largest amount of hay is cut:

Counties.	Acres.	Tons.	Average.
Ashtabula.....	51,264	69,804	1.33
Cuyahoga.....	39,925	51,078	1.32
Geauga.....	39,761	51,211	1.28
Licking.....	27,035	57,702	2.09
Lorain.....	24,633	49,451	1.63
Mahoning.....	28,994	46,728	1.41
Medina.....	30,155	46,892	1.56
Portage.....	41,414	59,337	1.45
Stark.....	35,771	47,310	1.35
Summit.....	28,514	41,484	1.48
Trumbull.....	51,987	76,757	1.50
Wayne.....	31,078	41,261	1.42

Twelve Counties.....440,431 642,035 1.46

These twelve counties raised more than one-third the whole amount of hay raised in the State. They are the counties in which

the greatest proportion of sheep and milch cows are kept.

5. RYE, BARLEY, AND BUCKWHEAT.—The crops of rye, barley and buckwheat were first obtained for the year 1858, and returned by the Assessors in 1859. The results were:

	Acres.	Bushels.	Average.
Rye.....	90,191	874,533	10 bush.
Barley.....	125,745	2,103,199	17 "
Buckwheat.....	71,282	791,921	11 "

The extent of these crops, taken together, was 3,769,673 bushels. The average per acre must be regarded as quite small. The crops of these articles for three years are as follows:

	Rye. Bushels.	Barley. Bushels.	Buckwht. Bushels.
1839.....	814,205	212,450	633,149
1849.....	425,918	354,458	638,060
1858.....	874,513	2,103,199	791,921
Aggregate of these grains in 1839.....	1,650,764		
" " " 1849.....	1,418,326		
" " " 1858.....	3,769,673		

This year buckwheat has been planted to a far greater extent than in any previous year, in consequence of wheat being killed in the north-east part of the State. The crop will probably be a large one.

[Concluded in our next.]

[From the Council Bluffs Bugle.]

COUNCIL BLUFFS & ST. JOSEPH RAILROAD.

Below will be found a series of resolutions passed by the Directors of this road at their last meeting, in which they express their determination, if possible, to have the cars running on this road by the first of Jan., 1861; but in order to do this, the stockholders must promptly meet their obligations to the company. We understand that a small assessment has been made by the company, and that it is their intention to call for monthly installments until all the subscriptions to stock are paid for. In the meantime, the work will steadily progress, and with the aid of the bonds of our city and the contributions by the counties on the line of the road of swamp lands and private subscriptions of stock, they expect to raise the requisite means to grade and tie the road to the State line by the first of Oct next. We hope, therefore, that all will contribute to the good work contemplated by the company.

Resolved by the Council Bluffs & St. Jo. R. R. Company.

WHEREAS, While we know that the early completion of the C. B. & St. Jo. R. R. is the great desire of the people of this country, and that the citizens of Pottawattamie, Mills and Fremont counties, in Iowa, have both privately and publicly expressed a desire to assist in the building of this road, both in their private and corporate capacities, and knowing that the means are in the country to complete this work, and the people are willing to appropriate the same, therefore:

Resolved, That we are determined to push the road to completion as fast as possible, and that we do fully resolve to have the cars on the road by the first day of January, 1861, and, in order to secure this object, it is necessary for us to get our means together as fast as possible; and in consideration of this fact,

Resolved, That J. S. Andrews, our General Agent, is hereby authorized to collect the present assessment made upon the capital stock, and to solicit and obtain additional subscriptions of stock to this road, either in cash, ties, or land subscription

J. S. ANDREWS,

Secretary pro tem.

THE PACIFIC RAILROAD.

The only points of view in which a railroad from the Missouri to the Pacific remains to be considered are those of its practicability, cost, location, and the ways and means. We must consider these briefly, but frankly.

1st. As to practicability, there is no room for hesitation or doubt. The Massachusetts Western, the Erie, the Pennsylvania, and the Baltimore and Ohio, have each encountered difficulties as formidable as any to be overcome by a Pacific Railroad this side of the Sierra Nevada. Were the railroad simply to follow the principal emigrant trail up the Platte and down the Snake and Columbia to Oregon, or south-westwardly from the South Pass to the foot of Sierra, it would encounter no serious obstacle.

2d. The dearth of timber on the Plains is the chief difficulty to be overcome; and this, with the prevalence of deep snows in and about the South Pass will probably send the Road considerably north or south of that famous and facile Pass. We presume the shortest, most feasible, and best wooded route for a railroad from the Mississippi to the Pacific is one from Minnesota to Puget sound, leaving the Rocky Mountains, save some low spurs, on the south, and encountering less formidable snows than those of the North Platte, South Pass, and Green River. Another pretty well timbered and direct route, with but a moderate elevation at the pass of the Rocky Mountains, strikes westward, from Dubuque to the Yellow Stone, follows one of the sources of that stream into and through the Rocky Mountains, and thence down a similar stream to the Columbia, and so through Oregon to Astoria. By taking this route, the timber of the Rocky Mountains could be cheaply rafted or floated to every part of the track on either side at which timber is naturally deficient. The routes which turn the Rocky Mountains and the Sierra Nevada by the south are necessarily longer than those above indicated (the earth's circumference being greater toward the Equator than near the Pole), traverse in good part a parched and sterile desert, and must encounter serious obstacles in the dearth of water and in crossing the Rio Del Norte and Colorado. They would, however, rarely or never be formidably obstructed by snow.

In our judgement, however, the preferable, though not the easiest, route for a Pacific Road traverses the valleys of the Kansas and its Smoky Hill fork, crossing thence to the more northerly sources of the Arkansas, and passing with one of them through the Rocky Mountains, not far from the South Park, thence winding down some tributary to the Colorado, thence up a western fork or valley and down the Timpanagos or some such stream into Utah, and through that Territory on or near Capt. Simpson's new road to the valley of the Carson, Truckee, or whatever stream should be found to proffer the least difficult way across the Sierra Nevada, to San Francisco. A railroad on this route would at once command a large and lucrative traffic from the Kansas Gold region, from Utah, and from the newly discovered but rich and growing Gold Region of Carson Valley or Western Utah—soon, we trust, to be the territory of Nevada. Thousands have recently been drawn to Carson Valley by the fame of these Mines; and, the fact being established that Gold, Silver, and other valuable metals are found in Carson Valley, it is at least strongly probable that they will be found elsewhere along the eastern base of the Sierra Nevada. A railroad upon this route would have an immediate and large local traffic, both

in passengers and goods, from California to Carson Valley, from Missouri and Kansas to the Rocky Mountain Gold Region, and from each to Utah. Its Mails, too, would be heavier and far more beneficent, than if conveyed by any other route. We judge, therefore, that on this route the Railroad is most likely to be built, unless future developments of Mineral Wealth north or south of it should change the whole aspect of affairs.

3d. And now as to cost and the ways and means.

This road can not be built cheaply; for provisions and all the necessities of life must rule high along its line, and most of the laborers will have to be carried thither. Yet it is but fair to consider that many of the heaviest items of expense on most other railroads—Land and Land Damages, Timber, Stone, &c.—will here cost nothing but the labor of preparing them for this use. Then rock-cutting will, in the average be light, and the bridging still lighter. For much of the distance, \$5,000 per mile will grade and bridge a double track in the very best manner. Doubtless, there are miles that would cost \$100,000; but these are comparatively few; while Colorado is the only formidable stream to be crossed between the Missouri and the Sacramento. And, as the road would necessarily be commenced at each end and pushed toward the center, it would have a considerable traffic on the very first hundred miles that should be completed, and a large one on the first five hundred. Were it to be finished next April so far as Carson Valley from the West and "Pike's Peak" from the East, we firmly believe that those two sections would pay expenses and interest on cost forthwith. If so, what might not be hoped from the completed road?

Again: It is not to be considered that, by building thus in sections, each portion, as finished, would be used to forward provisions, rails, timber, &c., for the next. If wheat be worth \$5 per bushel to-day at Denver, it by no means follows that it would cost half so much with a railroad from the Missouri completed nearly or quite to that point.

We estimate that a railroad from the Missouri at Kansas City, Wyandot, Leavenworth, Achison or St. Joseph, to San Francisco, must be nearly or quite 2,000 miles long, and that it would cost, with a double track and fully equipped, \$75,000 per mile, or \$150,000,000. A sanguine engineer would probably reduce this to \$50,000 per mile, or \$100,000,000; but, as most works cost more than they are expected to, it is as well to begin with large figures, so as not to be disappointed. More than a third of this road would build itself—that is, so much of it as lies in California or within the boundaries assigned herself by the new State of Kansas would readily be built by private enterprise if the connecting link were certain to be perfected in due season. It seems advisable, however, to have a single road, under one direction, from the Missouri to the Pacific, and thus make the certain profits of the extremities contribute toward the construction and support of the less promising center.

But supposing the cost of a Pacific Railroad to be \$150,000,000, or even \$100,000,000, how is so large an amount to be procured.

We answer—Not wholly by individual subscription or voluntarily associated enterprise. The amount is too vast; the enterprise too formidable; the returns to remote and uncertain. In the present depression of Railroad property and interests, an attempt to raise such a sum for any such purpose would be madness. One railroad to the Pacific would probably pay; but what assurance could an association of

private citizens have that, having devoted their means and energies to the construction of such a road, it would not be rivaled and its value half destroyed by a similar work on some other route? No Hundred Millions can be obtained for such an undertaking without assurance of Government aid.

But neither will it answer to commit the Government unqualifiedly to the construction of such a work. Its cost, in the hands of Federal functionaries, would be incalculable; it would be an infinite source of jobbing and partisan corruption; it would never be finished; and its net revenues would amount to nothing. And then the question of location—the conflict of rival interests—would alone suffice to prevent the construction of the work by the Federal Government.

But let that Government simply resolve that the Pacific Road shall be built—let Congress enact that sealed proposals for its construction shall be invited, and that whichever responsible company or corporation shall offer adequate security for that construction, to be completed within ten years, on the lowest terms, shall have public aid, provided the amount required do not exceed Fifty Millions of Dollars, and and the work will be done, certainly for Fifty Millions bonus, probably for much less. The Government on its part should concede to the company a mile in width, according to the section lines, of the Public Lands on either side of the Road as built, with the right to take Timber, Stone, and Earth from any Public Lands without charge; and should require of said Company that it carry a daily through mail each way at the price paid to other roads for conveying mails on first class routes; and should moreover stipulate for the conveyance at all times of Soldiers, Arms, Munitions, Provisions, &c., for the public service, at the lowest rates, with a right to the exclusive possession and use of the Road whenever a National exigency shall seem to require it. The Government should leave the choice of route entirely to the Company, only stipulating that it shall connect the navigable waters of the Mississippi with those of the Pacific Ocean, and that it shall be constructed wholly through our own territory. Payment of the National bonus to be made, say one-twentieth so soon as one-tenth of the road shall have been finished and approved, and at this rate until one-third of the road shall have been built, when the remainder of one-fourth of the bonus shall be paid; when half the road shall have been built, the payment of bonus shall be increased to one-third; when the work is three-fourths done, what remains of five-eighths of the bonus shall be paid; and when the work is done and accepted, all that remains unpaid of the bonus shall be handed over to those who will have so nobly earned it.

By adopting this plan, the rivalries of routes will be made to work for instead of working against the construction of the road. Strenuous efforts will be made by the friends of each to put themselves in position to bid low enough to secure the location; and the lowest rate at which the work can safely be undertaken will unquestionably be bid. The road will be the property of the Company constructing it, subject only to the rights of use stipulated and paid for by the Government. And even were it to cost the latter a bonus of full Fifty Millions, we feel certain that every farthing of that large sum will have been reimbursed to the Treasury within five years after the completion of the work in the proceeds of Land Sales, in increased Postages, and in duties on goods imported, sold, and consumed because of this Railroad—not to speak of the annual

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1858, and circular which can be had on application.

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1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the retort is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet,.....	\$300 00
do do do 350 "	335 00
do do do 400 "	375 00
do do do 500 "	450 00
do do do 600 "	525 00
do do do 700 "	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

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43 MAIN STREET, CIN.

W. HARVEY'S SAFETY JOINT For Coupling the Ends of "T" Rail PATENTED, NOV. 2, 1858.

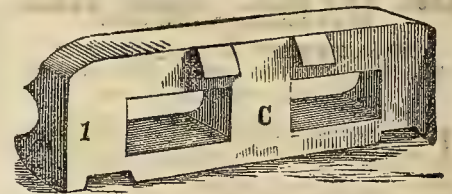


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

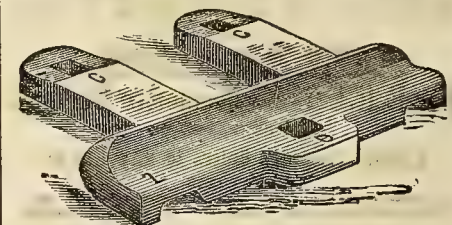
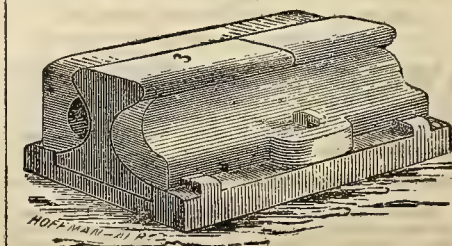


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate O. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other. One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered a vast improvement. It will be seen that on a part assisted and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly safe road, thereby doing away with the breaking of rails, wheels, and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear the rolling stock of the road.

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WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use; and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and, for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

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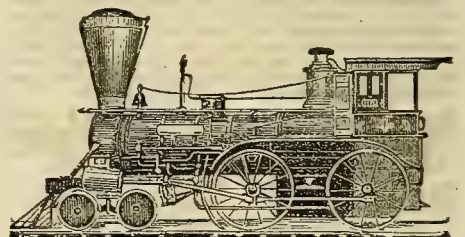
This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works
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OF THE NEW YORK CENTRAL R. R.

	Leave Albany.	Arr. Buffalo.	Arr. S. Br.
Steamboat Exp.	7 00 A. M.	7 00 P. M.	7 00 P. M.
Mail	9 00 A. M.	12 50 A. M.	9 00 P. M.
New York Exp.	11 15 A. M.	9 00 P. M.	4 00 A. M.
Night Exp.	5 00 P. M.	4 00 A. M.	4 00 A. M.
Utica Accom'n.	6 00 P. M.	Ar. U. 10 00 P. M.	10 00 A. M.
N. Y. Mail	11 15 P. M.	10 00 A. M.	Ar. Albany 10 00 A. M.
	Leave Buffalo.	Leave Bridge.	
New York Exp.	5 15 A. M.	5 15 A. M.	3 30 P. M.
Steamboat Exp.	8 00 A. M.	8 00 A. M.	8 00 P. M.
Mail	11 15 P. M.	11 00 P. M.	2 30 P. M.
Cleveland Exp.	6 00 P. M.	6 00 P. M.	4 40 A. M.
Cincinnati Exp.	11 00 P. M.	11 00 P. M.	8 30 A. M.
Utica Accom'n.			10 00 A. M.

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The undersigned are prepared to furnish Locomotives equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.
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P. DUDLEY,
President of the Board

Jan.

The Railroad Record.

E. D. MANSFIELD, }
T. WRIGHTSON, } Editors.

CINCINNATI:
Thursday Morning, Feb. 9. 1860.

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Publishers and Proprietors.

The European Agents for the *Railroad Record* are Messrs. FREDERIC ALGAR of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

We regret to learn, through the medium of a circular from the secretary of the Railway Bureau, that the printing office of the *Review* with all its edition and engravings, was totally destroyed by fire on the morning of the 29th ult. The *Review* is promised for this week, which shows commendable enterprise. We have not seen a copy of the *Review* for the last three months, and until the receipt of the circular, had supposed it had gone the way of a vast majority of all new newspaper enterprises. Will the publishers send us a copy occasionally?

The Annual Report of the State Directors of the Camden and Amboy Railroad and Delaware and Raritan Canal Company, shows the receipts of the railway and its branches to have been \$1,802,589 53, and the expenditures \$891,337 50. The gross receipts by the canal amounted to \$492,198; expenditures, \$157,068 66. The whole revenue accruing to the State was \$140,286 70.

It is said that iron which has lain, for a great length of time, in one position, becomes crystallised, and breaks readily on being disturbed. There has been instanced the case of an anchor in Woolwich Dockyard, which anchor it was said had lain undisturbed for nearly one hundred years, but was finally broken with a very slight blow.

TRADE OF BALTIMORE.

INTERESTING STATISTICS.

There are few documents come to us as interesting and valuable, as the Annual Statement of Trade and Commerce issued by the *Daily American*, Baltimore. It is full of useful information, especially to Western people, for Baltimore carries on an immense trade with the Ohio Valley, and one useful and profitable to both parties. We shall extract, for the benefit of our readers, some of the most useful information.

1. OF THE BALTIMORE AND OHIO RAILROAD. The gross receipts of this main line of travel between Baltimore and the West, from the causes to which we have already adverted, show a considerable reduction this year from the receipts of the road during the fiscal year ending with September, 1858. The following are the gross receipts of the road for three years past:

1857, gross revenue.....	\$5,145,833 06
1858, “ “	4,573,912 77
1859, “ “	4,301,009 27

The decrease in gross receipts, however, does not indicate, to the same extent, a decrease in the business of the road; on the contrary, the aggregate tonnage of the road has been nearly, if not quite, as large as that of 1858. From the able report of the Transportation department of the road we learn that while there has been a large decrease in eastward bound freight, owing entirely to the short crops and continued depression of business, the very large increase shown of western bound freight clearly indicates that the road is becoming better appreciated as a prompt and reliable transportation line.

2. FLOUR TRADE.—Baltimore flour trade has always been very large. Flour and wheat have together made an amount exceeding a million of bushels per annum.

	Bushels.
Wheat received at the Corn and Flour Exchange.....	3,162,843
Which was disposed of as follows:	
Taken by City Millers.....	2,466,838
Shipped Coastwise.....	660,713
Shipped to Foreign Ports.....	15,292
Total.....	3,162,843

This is equivalent to 600,000 barrels of flour. The receipts of flour, by the Baltimore and Ohio Railroad, were 754,087 bbls. The total amount of flour received and made, at Baltimore, was 1,354,000 bbls. Of this 368,000 bbls. were exported to foreign ports, and the residue exported to the interior or consumed.

The total amount of all kinds of grain, received at Baltimore, in several years, was:

COMPARATIVE RECEIPTS OF GRAIN AT BALTIMORE FOR THE PAST FIVE YEARS.

GRAIN.	1855.	1856.	1857.	1858.	1859.
Wheat.....	2,998,639	4,278,199	3,102,904	2,716,731	3,162,843
Corn.....	3,093,178	5,003,492	4,208,618	4,046,745	3,341,660
Oats.....	1,363,400	1,503,000	1,157,513	1,115,194	947,215
Rye.....	250,000	245,000	151,402	110,000	111,007
Pease.....	20,000	15,000	6,000	23,000	15,000
Beans.....	1,200	2,000	2,000	2,000	3,000
Total.....	8,646,417	11,043,700	8,628,487	8,013,670	7,584,225

3. COFFEE TRADE.—Baltimore is the third port of the United States, in regard to the importation of Coffee. The following is a comparative table:

FROM	YEARS.				
	1855.	1856.	1857.	1858.	1859.
	bags.	bags.	bags.	bags.	bags.
Rio de Janeiro.....	249,069	197,980	203,560	194,060	231,370
Laguayra & P. Cabello.....	12,565	17,798	4,077	10,711	8,148
Maracaibo.....	.....	400	.....	.....	.....
Java.....	.....	.....	.....	4,949	320
Jamaica.....	.....	.....	.....	487	538
Other ports.....	53,881	40,160	1,634	.....	767
Coastwise.....	2,348	5,418	2,020	7,604	5,927
Total.....	267,857	231,771	211,697	217,811	247,070

Increase of imports, compared with 1858..... 29,259

4. BEEF CATTLE.—The receipts at the Cattle Scales during the past year of Beef Cattle exceed those of 1858 by over one thousand, but fall short of the receipts for the year 1856, which amounted to nearly 50,000 head. The offerings for the past year were larger than those for the preceding year, and we are pleased to observe that 1,500 head more have been killed by our butchers and packers than during 1858. The number taken by butchers in 1858 was 34,029, and during 1859, 35,463 head. The following is a summary of the Cattle offered at the State Cattle Scales during the past five years:

Offered in 1855.....	46,630 head.
“ in 1856.....	49,191 “
“ in 1857.....	49,033 “
“ in 1858.....	43,131 “
“ in 1859.....	44,387 “

The receipts of Beef Cattle over the Baltimore and Ohio Railroad during the year ending September 30, were 19,243 head, being 4,900 head more than during the preceding year.

5. GUANO TRADE.—One of the most curious and novel branches of the American trade is that in Guano. In the West, this article is scarcely used at all, but in the South Atlantic millions of dollars are expended on it. The value of this trade amounts to \$3,500,000 annually.

6. OYSTER TRADE.—But, among all the branches of commerce, in Baltimore, the most unique is that in Oysters. Sea fish is almost the only article the West can not get for itself. Of course, as the West gets what it wants, it must buy Oysters on the Atlantic, and here is an account of that business.

The increase in the sales of Oysters is estimated at fully thirty-three per cent. this season.

The raw Oysters during the Fall and Winter are shipped to the farthest points of the West in air-tight cans, packed in ice, and reach their destination in excellent condition. The preserved Oysters are shipped to the West as well as to California, Australia, South America, and various parts of Europe, and meet with ready sale wherever they are sent.

The number of persons employed in the business of opening, preparing and packing Oysters in this city varies from 2,000 to 2,800.

Of those engaged in opening (or shucking) about 1,500 are colored persons. The packing and sawing gives employment to several hundred white men, the number employed in filling the cans alone exceeding two hundred.

The Oysters are all procured in the waters south of the mouth of the Patapsco river. A great portion are taken by dredging in ten to twenty fathoms water, but the largest and finest are taken with tongs in shallower water, in the numerous rivers and inlets, the best being mostly found towards the mouth of the Chesapeake. In many places the system of planting is profitably resorted to, the mode being to take the small Oysters from deep water and lay them down in shallow coves, where they increase in two or three years to a very large size. The process is an easy and certain one, for the ground requires no preparation, nor is the crop ever affected by any kind of weather, and the increase is unfailling. The Oysters are brought to the city in small vessels, varying in size from 20 to 150 tons, carrying from 300 to 3,000 bushels each. Among them we include a fast sailing species of small schooners called "pungies," peculiar to our Bay alone, and costing from \$1,200 to \$3,000 each. The number of vessels, large and small, engaged in the trade is estimated at *one thousand*.

The quantity of tin plate used for this especial business is no inconsiderable item. It is supposed that the value of tin plate and solder annually consumed is not less than \$250,000. The number of tanners employed in the manufacture of cans is over three hundred, and one factory alone, in which machinery is extensively employed, made this year *one million* of tin cans. About 1,000,000 feet of lumber are consumed in the manufacture of boxes for packing the cans, to make which some two hundred carpenters are employed. Exclusive of the value of the vessels, buildings, etc., the capital invested in the business is about \$1,000,000.

Value of Trade in Packed Oysters.....	\$3,500,000
" Oysters consumed in city and vicinity. .	1,000,000
" Preserved Fruits.....	215,000
Total.....	\$4,715,000

This is a most enormous trade in so small a thing.

It proves, that America does not fall short of ancient Rome in epicureanism. The Western people live well.

By the completion of the Mississippi Central Railroad, New Orleans is now brought within three and a half days of New York, by a continuous line of railroad. Twenty-four hours will suffice to reach the mouth of the Ohio; thirty hours, St. Louis; and thirty-six Chicago and Cincinnati. The great route now just formed will be to the travel of the South-West what the Mississippi is to its commerce.

ARTESIAN WELLS.—THE COLUMBUS WELL.

Among the curiosities of modern art, must be ranked the Artesian Well. There are now a great many of these wells, many of them successful, but some of them disappointing their projectors.

We believe the general theory of an Artesian Well is this,—that the earth is full of springs, streams of pure water,—that however deep the water may be, at a particular place, it must have an origin somewhere near the surface,—and, lastly, as water must rise to its level, if the artesian well strikes a stream of pure water it must rise up, and be a fountain, supplying good and abundant water. This theory has often proved successful, but sometimes fails. It seems to us, that, there are three difficulties in the way, which may make the finding of a good artesian well a distant affair.

In the first place, as the well is started without knowing that there is a stream of water in its direction, at all, it must be very good fortune if pure water, in quantity, is found in any moderate distance, next it must be another piece of good fortune, if the first streams of water struck are pure, or abundant. They may pass through mineral beds, or, be very small. Lastly, the well may be sunk in an extensive plain or level country, where consequently the water has its head at a great distance, and the well must be sunk very deep to find strength, and quantity sufficient to *raise* it.

Now, these are the very difficulties, which artesian wells have met with. The well dug by the Belchers, at St. Louis, was over 2,000 feet in depth, and we do not know, but it furnishes good water yet. An artesian well near Lafayette, (Ind.) has furnished abundance of mineral water but not, we believe, any pure drinking water.

But the most curious example of perseverance in *boring* the earth is, the effort of the State of Ohio, to break its crust, at Columbus. The State has got an iron tube and turned, twisted, and screwed it down to the distance of 2,340 feet. Notwithstanding this, they have got no good water. If so, where is it to come from? The summits of the Alleghanies are but little higher, and the Rocky mountains are 1,200 miles off. It is not impossible, certainly to get water, but, it is becoming more and more difficult. The *bore* is, perhaps, scientifically paid for, by the knowledge we get of the crust of the earth, in this region. We should like to have the criticism of some geologist on the fact, that we go through such an immense mass of limestone while, at a short distance south, we have so much pure free, or sandstone. We extract from the annual report of the State House Commissioner, the following interesting paragraph, on the geological formation of the earth-crust there. It strikes geologists with some surprise, and may modify hereafter some of the theories of our western formations.

Mr. JOSEPH SULLIVANT, says:

A cursory microscopical examination has not revealed any organic remains.

The geological evidence obtained from this well demonstrates—

1st. That a great thickness of rocks (about 1300 feet,) derived from the consolidated marine mud of an ancient ocean, underlies our cliff and blue limestone formations.

2d. It reveals upwards of 1300 feet of rock formation not hitherto suspected, and nowhere visible on the surface in Ohio.

3d. There is reason for believing the base of the silurian limestones and shales, for the last borings are increasing in silica, which renders it highly probable that the next stratum will be a sandstone, which may possibly prove to be water bearing.

In conclusion, I repeat that this examination of the borings, as well as the former, has been mainly confined to the lithological character, which is somewhat difficult to determine from such comminuted fragments, and which has been more or less marked by admixture with the debris of each overlying stratum.

It is a curious idea that we are living above an ancient ocean, whose bed lies some 2,000 feet below the surface of the soil on which we stand! Then, to think of 1300 feet of rock intervening, and proving what we are glad to learn, that the earth is not so frail about here as some persons think!

PACIFIC RAILROAD.

We publish elsewhere through the politeness of the Hon. Mr. Hamilton of Texas, the bill now before Congress to provide for the construction of a Railroad and Telegraph Line from the Mississippi River to the Pacific Ocean. Our own sentiments on the subject of a Pacific Railroad are so well known, that they need hardly be repeated here. At the last Presidential election both of the opposing political parties declared themselves in favor of its construction, and thus the friends of this measure had every guarantee they could reasonably expect that it should receive the early attention of the government. Three years of the present administration have now passed by and yet nothing has been done for this great enterprise. In addition to the pledges of the two great political parties, the friends of this great measure throughout the Union addressed Congress in urgent petitions upon this subject, we doubt very much if as many signatures of able and intelligent men have ever before been presented to the national legislature in favor of any other measure—Congress as the representatives of the people are bound to consider these presentations of the peoples' wishes, and the fact that there has been a bill before this honorable body each year for several successive sessions, is a conclusive evidence that they feel the importance of the enterprise. Hitherto

the magnitude of the work, the insufficiency of its various provisions or inability of the parties interested to grapple with an enterprise of the gigantic proportions of the one now before us, have delayed action. Many of these objections do not now exist in reference to the present bill. The work it is true has lost none of its magnitude. It still involves the construction of a line of Railroad across the uninhabited center of the Continent. The provisions of the bill, however, are liberal. They give to the Southern route six sections of public lands per mile from the Mississippi River to the Eastern boundary of Texas, through the State of Texas nothing, from the Western boundary of Texas to the Eastern boundary of California fifty sections per mile, from the eastern boundary of California to San Francisco twelve sections per mile. To the Northern route is given twelve sections of land per mile for the first five hundred miles from the western boundary of Iowa or Missouri, thence fifty sections per mile to the eastern boundary of California, thence twelve sections per mile to San Francisco, and twenty sections per mile to a branch from the main line to the mouth of the Columbia or to Puget's Sound. The bill also provides for the loan of United States bonds to each of these companies at the rate of one million dollars for every fifty miles of road constructed and equipped till the gross amount of the loan to each, amounts to thirty-five millions of dollars. The companies are bound by stringent provisions to complete their roads in good faith in the space of twelve years.

With the liberal provisions of this bill, there is no doubt but that the roads can be built. The land grants to the Southern line are much less than to the Northern, in this we see no justice, but presume that the parties interested fully understand this feature.

The names introduced into this bill as the corporators of each of these two lines respectively, are the best names that could be selected in the country. They are all prominent among the most successful lines now built and represent the great railroad interests of the whole country. If these gentlemen can not build the roads, it were idle to seek for other stronger names.

We can not refrain in this notice from expressing the hope that the bill now before Congress, will meet the early and cordial approval of that honorable body. Its provisions may appear to some to savor of excess of liberality—but when the obstacles to overcome, the magnitude of the work and the great benefits to be derived from its early and successful completion are considered, they will be found none too liberal. The undertaking will require a large addition of private means to the public grants. To this great enterprise we are induced by every consideration of national honor interest, and propriety. It is necessary alike for the preservation of the social and family

ties of the Union, the interests of trade and commerce, not only of our own country but of the world, and the defence of that national honor so dear to every true hearted citizen of this great Republic. May our legislators give this measure the moral force of an earnest and willing endorsement. And may ours be the credit of first constructing this great inter-oceanic route. The position of our country is already a proud one, but prouder far will it be when we have circled the western hemisphere with the iron bands of union.

THE STATISTICS OF OHIO.

Climatology and Meteorology—Horticulture—Condition and Progress of Agriculture—Population—Mining and Manufactures—Commerce and Locomotion—Property, Debt and Taxation—Social Statistics—Marriages—Crimes and Casualties—Naturalization—Pauperism—Educational Matters.

REPORT OF E. D. MANSFIELD, ESQ., COMMISSIONER OF STATISTICS.

6. OF POTATOES.—I have no returns of this crop except for eight counties in the north part of the State, and they are not enough upon which to found an estimate. In these counties the aggregate was 40 per cent. less than the same counties in 1850, and the average about 70 bushels per acre.

7. AGGREGATE OF ALL CROPS.—The following table presents a view of all the grain crops, with those of hay and potatoes, for the years 1839, 1849, and 1858:

	1839.	1849.	1858.
	Bushels.	Bushels.	Bushels.
Corn.....	33,668,144	59,078,695	50,863,582
Wheat.....	16,571,661	14,487,351	11,655,433
Oats.....	14,393,103	13,472,742	8,926,251
Barley.....	212,440	234,338	2,193,191
Rye.....	814,205	425,918	874,513
Potatoes.....	5,805,621	5,245,760	5,000,000
Buckwheat.....	633,139	938,060	791,921
Hay.....	1,022,037	1,443,142	1,806,441
	Bushels.	Bushels.	Bushels.
Aggregate of the above, exclusive of hay.....	72,097,713	93,902,884	84,314,941

The above three years, however, are very far from being correct tests of an average crop, for it happened that each of these years was relatively a bad year for crops. Let us, then, take the years 1855 and 1857, which we have for wheat and corn, and make a proportional (as between 1849 and 1858) for the minor crops. We have, then, this result:

	1855.	1857.
	Bushels.	Bushels.
Corn.....	87,587,434	83,565,186
Wheat.....	19,569,320	25,397,615
Oats.....	20,000,000	25,000,000
Barley, Rye and Buckwheat.....	2,600,000	3,000,000
Potatoes.....	5,000,000	5,500,000
Aggregate.....	134,756,754	141,452,800

As the crop of 1857 was very good and the crop of 1858 a very bad one, and they are the most recent we have, we shall obtain a very fair view of the average production of grain in the State by taking the average of those two years thus:

	Bushels.
Aggregate grain crop of 1857.....	141,452,800
1858.....	84,314,941
Sum of the two years.....	225,767,741
Average production.....	112,883,870
Made up as follows:	

	Bushels.
Corn.....	70,000,000
Wheat.....	20,000,000
Oats.....	16,000,000
Other grain.....	3,000,000
Potatoes.....	5,000,000

This is slightly over the amount, and occurs from the absence of fractions.

8. DISTRIBUTION OF ARABLE LANDS.—The tables of wheat and corn for eleven years, and the tables of other crops for 1858, show that the arable or grain land of Ohio is divided as follows:

	Acres.
In Corn.....	2,200,000
In Wheat.....	1,700,000
In Oats.....	1,350,000
In Barley, Rye and Buckwheat.....	300,000
In Potatoes.....	60,000
Aggregate of ploughed land.....	5,060,000

Looking now to the whole of what was defined in the U. S. of 1850 as "improved land," we have this result:

	Acres.
Arable land (as above).....	5,060,000
Meadow land.....	1,350,000
Pasture land.....	3,400,000
Orchards, gardens and yards.....	800,000
Aggregate "improved land".....	10,610,000

The comparison of "improved land" as between 1849 and 1859 stands thus:

	Acres.
1849.....	9,851,493
1859.....	10,610,000
Increase.....	758,507

If, as I presume is the fact, the census table included the land used for roads and public improvements, the actual increase of improved land is 1,180,000 acres, for the land used by roads and improvements is 424,000 acres. As the State contains 25,000,000 acres, but little more than two-fifths of its surface is yet reduced to a productive condition, and of this only one-half is arable or grain producing land.

9. COMPARATIVE PRODUCTIONS OF OHIO GRAIN CROPS, WITH THOSE OF OTHER COUNTIES.—I take from the elaborate statistics of that State, published by the State in 1855, the following grain production of New York, as compared with the general average of Ohio:

	Acres.	Crops.	Per Acre.
		Bushels.	Bushels.
New York.....	4,072,000	76,634,910	19
Ohio.....	5,060,000	112,883,870	22½

We see by this comparison, that the grain production of New York, is to the acre 15 per cent. less than that of Ohio, the latter being assumed as a general average. If we take the minimum crop, (that of 1858,) we must also deduct half a million of acres from the arable lands which could not be planted on account of the rains. For 1858, we have in Ohio, 4,600,000 acres of arable land, producing 84,300,000 bushels, which is but a trifle less than 19 bushels per acre, the New York produce. Take now the crop of 1857, and we have a produce of 140,000,000 of bushels, or 27 bushels per acre, 50 per cent. beyond the produce of New York.

In France, the crop of 1835, was a large one, the largest, comparatively, for 20 years. Taking that crop as the basis of comparison, we have this result:

Arable lands (22,559,151 hectares).....	57,507,000 acres.
Entire grain (including potatoes).....	772,000,000 bush.
Average per acre.....	13½

It will be seen by this that the grain crop of France, in a very good year, did not reach the average production of Ohio, per acre, by near one-third. But if we look into the details of the French crop, we find that the average productions of wheat, and the small grains per acre is much above that of Ohio, but that Ohio much more than makes up the deficiency by its relatively immense crop of Indian corn. Since, however, this grain is for both man and beast, its utilitarian value to society is greater than any staple article raised on arable land.

The comparison is in favor of Ohio, not merely in quantity but in quality. Hence the great superiority of Ohio and the Mississippi valley over any country in Europe as to the produce of land, and the capacity to support a dense population.

I will add one more comparison in a different region. Austrian Galicia was a part of ancient Poland, and a growing country. It contains 34,340 square miles—just four-fifths the surface of Ohio, and a population of 4,000,000 people. The return of arable lands and of grain products for 1837, were as follows:

Arable lands.....	8,078,513 acres.
Wheat.....	4,010,732 bush.
Rye.....	12,747,868 "
Barley.....	17,770,016 "
Oats.....	24,012,016 "
Aggregate.....	67,409,145 "
Average.....	8 1/2 "

It may be that other years would produce a better result for Galicia, but as this is much below even the minimum crop of Ohio, it is obvious that Galicia, though a country mainly productive of small grain, is much less so than Ohio.

10. ANIMALS OF OHIO.—A glance at the proportion of animals in Ohio, and a comparison with other States, will show in one aspect both the good condition and comparative wealth of the people. The following is a table of the number and value of animals in Ohio, at different periods in eighteen years.

1841.		1845.	
No.	Value.	No.	Value.
Horses and mules.....	348,920 \$13,954,930	387,200 \$15,488,000	
Cattle.....	609,496 \$4,876,194	723,353 \$5,786,824	
Aggregate.....	958,416 \$18,831,124	1,110,553 \$21,274,824	
1847.		1850.	
No.	Value.	No.	Value.
Horses and mules.....	473,597 \$15,817,328	515,832 \$19,329,617	
Cattle.....	900,162 \$8,304,490	1,103,111 \$11,315,560	
Sheep.....	2,365,025 \$1,822,564	3,412,707 \$1,984,983	
Hogs.....	1,757,318 \$3,104,706	1,672,178 \$1,992,029	
Aggregate.....	6,496,101 \$29,105,088	7,103,828 \$34,532,189	
1854.		1858.	
No.	Value.	No.	Value.
Horses, etc.	632,598 \$32,512,983	655,754 \$38,450,896	
Cattle.....	1,172,667 \$20,995,640	1,718,640 \$20,836,979	
Sheep.....	4,845,189 \$8,031,864	3,877,860 \$4,755,215	
Hogs.....	2,887,015 \$558,487	2,541,904 \$6,191,373	
Mules..... (Included with horses.)		7,300 \$501,784	
Aggregate.....	10,137,459 \$67,099,044	8,800,438 \$70,730,247	

The increase of animals, as exhibited in these tables, has been most rapid since 1847. The increase of population has been 33 per cent.; the increase of animals 35 per cent., and the increase of value 130 per cent. The increase of animals reached its climax in 1854. Since then there has been a decline in number, although still an increase in the value. The decline has been almost altogether in sheep and this is due entirely to the depression of American wool manufactures.

The following table shows the relative number of domestic animals raised in Ohio, as compared with those in England, France, and Russia, and in N. Y. and Pennsylvania:

OHIO.	ENGLAND.	FRANCE.	RUSSIA.
Persons.	Persons.	Persons.	Persons.
Horses.....	1 to 4	1 to 14	1 to 5
Cattle.....	3 to 4	5 to 14	1 1/2 to 5
Sheep.....	6 to 4	22 to 14	3 to 5
Hogs.....	4 to 4	2 1/2 to 14	1 1/2 to 5
Aggregate.....	15 to 4	31 to 14	30 to 15

If we compound these ratios we shall find that Ohio has 15 animals to England's 9, Russia's 6, France's 5.

New York had 6,700,000 animals in 1850, and Pennsylvania 4,500,000, both States having much less, in proportion, than Ohio. The ratio in Ohio will probably diminish with the increase of population.

IV. POPULATION.

I have nothing new to add on this head. From 1856 to the present time, the annual increase has probably been 55,000 per annum, which would make the population, January, 1860, just 2,500,000. It may be less, for the migration from the State has been very large during the last six years, and that element is very difficult to determine. The chief increase of population now is in the towns; but there is a cause of greatly increased population in the future, which is just becoming apparent. This is the development of the iron and coal mines. In the last ten years this has been quite rapid. One-third of Ohio is underlaid with coal and iron, and there is no State in the Union—not excepting Pennsylvania—where fuel, for either families or manufactures, can be obtained permanently at a cheaper rate than in Ohio. In the Miami country, coal of excellent quality was had in December, 1859, at the distance of 100 miles from the mines, at ten cents per bushels, or \$2 80 per ton. The mining country is now increasing in population at the rate of five per cent. per annum, which is likely to be increased rather than diminished.

In the year 1858-9, ending July, the number of equalizations was greatly more than in the previous years, brought out probably by the excitement of the congressional elections. This, however, proves no more than the large number of European immigrants who arrived in the State in the year 1854, five years previously.

The number of new structures remains about the same—varying little from 10,000 per annum. I think it was much greater in 1852-3-4. Deducting the barns and additions, which are enumerated in the country, there will remain 7,000 per annum as actual new buildings, and at the ascertained ratio of population to new buildings, the result will be an increase of 50,000 per annum. I give these facts only as data for a fair estimate of population. Before an actual count there are always great mistakes made, especially by sanguine persons.

V. MINING AND MANUFACTURES.

No great change has taken place since my last report. The general depression of business has prevented any great increase. Two new species of manufacture have been commenced within two years, which are of interest as showing the progress of invention and art. One of these is that of sewing machines, and the other that of coal oil. In my report of 1858, I mentioned the fact that there were two factories for the manufacture of sewing machines in Cincinnati, and that the introduction of this sewing machine had greatly increased the manufacture of clothing. I find that the whole number of machines made in the United States up to the close of 1859, was 95,000, of which half were made last year. At the ordinary prices, the selling value of these was \$5,000,000. I estimate that not less than 10,000, amounting to \$500,000 in value were sold in Ohio.

1. COAL OIL.—The subject of coal oil has been fully discussed by Mr. Israel Dill of Licking county. He states that four years since there was but one languishing factory of coal oil in the United States, and the subject had scarcely been thought of in Ohio. Here, the first coal oil factory was erected in 1856, and since then the manufacture has grown up to be a great business.

I give below a condensed table of the coal oil factories in 1859:

Counties.	No. of factories.	Retorts.	Crude oil made daily.
Columbiana.....	1	..	no reports.
Cuyahoga.....	2	13	75
Hamilton.....	1	..	....
Coshocton.....	11	137	6,150
Jefferson.....	1	10	180
Licking.....	9	97	2,950
Mahoning.....	4	80	3,500
Muskingum.....	2	14	350
Perry.....	1	12	200
Scioto.....	32	..	210
Tuscarawas.....	1	8	200
Washington.....	1	4	....
Twelve counties....	46	365	13,725

Mr. Dill supposes that there are fully 15,000 gallons of crude oil made daily in Ohio, equivalent to 10,000 gallons of refined oil, worth \$2,000,000 per annum.

2. MINES.—In regard to mines, there is nothing new, except the continual development of the salt and coal deposits.

It will be entirely safe to say that the coal now mined annually, exceeds 50,000,000 bushels.

The iron mining was as follows:

Furnaces.	Men.	Pig Metal.	Value.
1840.....	36	1,427	28,000 tons \$ 700,000
1850.....	35	2,415	52,658 " 1,255,850
1857.....	33	5,300	106,000 " 3,180,600

There has been no considerable increase of the iron manufactures in Ohio since 1857, and a decided depression in the business, though I believe two or three new furnaces have come into being. It will be safe to estimate the iron mining of Ohio to be represented by 55 furnaces, 6,000 men, and 110,000 tons of pig metal.

3. OF SALT.—The Salt manufactures of Ohio are represented in the year 1859 by 2,000,000 bushels of salt, valued at \$150,000.

The entire value of mining products, consisting of Coal, Iron, Lime, Stone, Gypsum and Clay, in the form of pottery, brick, etc., is fully \$10,000,000.

VI. COMMERCE AND LOCOMOTION.

In the report of 1858, I made an elaborate exposition of the Export Commerce of Ohio. It was, I believe, perfectly correct, and there has been no important change since then. Notwithstanding the reduction of the grain crop in 1858, the surplus of products sent from this State was large. The Animal trade, both in live stock and meats, still continues to be immense. The number of hogs packed this winter at Cincinnati is about 400,000, a number considerably exceeding that of any former year. The whole number packed in the State probably reaches 650,000, and the whole number of hogs exported alive or dressed, 350,000, making a total of 1,000,000. On the other hand at least 300,000 came from Kentucky and Indiana, leaving 700,000 of the produce of Ohio sent to other States, and yielding (including cooperage, salt, and packing,) at least \$10,000,000.

The number of animals exported from Ohio, during either of the last two years, may be stated in round numbers as follows:

Cattle (including salt beef).....	120,000
Hogs (live and salt).....	700,000
Sheep.....	200,000

The number brought from Indiana and Kentucky are excluded.

2. RAILROADS.—There are no important changes which would render a repetition of details necessary. The traffic is not materially greater than it was in 1858. The most important features to be noted this year are as follows:

a.—The Dayton & Michigan Road, to Toledo, has been completed. So has the Columbus & Piqua Road, which together, add about 110 miles to the aggregate length of railroads in this State.

b.—In the last two years several of the roads in this State have passed into the hands of receivers under decrees of Court. In fact, they are in the hands of the Courts, and supposed to be managed by them. Among them are the Cincinnati, Wilmington & Zanesville; Marietta & Cincinnati; Pittsburg, Fort Wayne & Chicago; Steubenville & Indiana; Central Ohio, and I think one or two others, embracing nominally \$45,000,000.

c.—The net proceeds of the traffic of Ohio Railroads for 1859 are, on the whole, greater than those of preceding years, owing mainly to the reduction of expenses.

d.—I have been repeatedly enquired of as to the amount and classification of the debts of Ohio Railroads, and as to where these debts are held. The two former questions I have answered in the report of 1858. The last one is not easy to answer. Bonds may be sold to contracting parties, but are distributed among a great many individuals, and are transferred in some cases many times. I will state three or four facts to show that the opinion that the majority of this debt is held abroad, is erroneous:

aa.—The whole debt of the country, and especially of such a State as Ohio, is by no means as large in proportion to property as most people suppose.

bb.—The accumulation of wealth and of active capital in the last ten years, has been enormous, and the result has been a large amount of capital seeking investment wherever there was a promise of large interest. A very large amount of Railroad bonds did not bring more than 75 cents on the dollar, and bore interest at the rate of 7 per cent. on their face, which is more than 9 per cent. income to the purchaser. These were sold in 1852-53-54 and 55, when commercial paper of the highest character was not worth more than 6 per cent. in New York, Hartford and Boston. The temptation to buy these bonds was great, and where they were 1st and 2d bonds, the danger of loss was inconsiderable, because roads would be worth this debt whatever might become of other creditors.

cc.—A very large part of our whole Railroad debt consisted of third mortgages and income bonds whose character was not high enough to induce foreign capitalists to invest. These were disposed of at home at low prices, and are now worth but little.

dd.—Since the crisis in 1857 the confidence in Railroad securities has been greatly impaired, and as a consequence American securities have frequently been sent home and sold in New York.

For these reasons I doubt whether so large an amount of American Railroad Bonds are held abroad as is generally supposed. I have, however, a number of facts which will go far to determine the truth on this point.

The following is a distribution of Railroad debts as regards classification:

1st mortgages.....	\$ 30,590,550
2d do.....	17,235,250
3d do.....	8,129,300
Income bonds, floating debt, and other mortgages.....	13,332,295
Aggregate.....	\$ 69,287,495

There are some \$5,000,000 of the Dayton and Michigan and the Mad River and Lake Erie, which are not classified. The table below shows in what places Bonds are held, so far as they are known to me, or have been returned by the officers of the companies:

	In Europe.	In America.
Bellefontaine & Indiana.....	%	%
Eaton & Hamilton.....	.....	Prin. in N. Y.
Scioto and Hocking Valley....	In Europe.	Prin. in N. Y., New J., Conn., Mass., and Ohio.
Mansfield & Sandusky.....	.....	New York.
Greenville & Miami.....	.....

Piqua, Columbus & Indiana.....	\$55,000 in Germany.	Bal. in N. York, Phila., and New England.
Iron Road.....	.....	Connecticut.
Cleveland, P. & Ashtabula.....	%	%
Springfield & Columbus.....	.....	Boston.
Xenia & Belpre.....	.....	Ohio, chiefly.
Cleveland & Zanesville.....	.....	Sold in N. York.
Dayton and Western.....	%	%
Ohio & Miss.....	\$3,000,000	\$7,000,000 N. Y.
Marietta and Cincinnati.....	4,200,000	3,570,000
Toledo & Wabash Valley.....	.....	New York and New England.

VII. PROPERTY, DEBT AND TAXATION.

A new appraisal of the landed property of this State was made in 1859. The equalized return was not completed in time for this report.

The report then furnishes tables of increase and decrease in the value of property, published heretofore in the GAZETTE.

1. I give below a number of counties in which the whole quantity of land sold was given, and the average price for the year 1857-8:

	Amount of land sold.	Aver. price per acre.
Coshocton.....	20,013	\$17
Crawford.....	22,960	21 74
Franklin.....	21,414	35 23
Gallia.....	25,196	9 42
Greene.....	20,970	50
Jackson.....	31,028	7 98
Licking.....	32,433	23 44
Morgan.....	15,390	15 60
Portage.....	24,131	28 14
Scioto.....	26,580	8 56
Shelby.....	17,641	15
Wyandott.....	15,308	16 98

Aggregate..... 283,961 acres.

Average..... 32,663 \$20 75

The following is a table of the same counties for the year ending July 1, 1859:

	Amount of land sold.	Aver. price per acre.
Coshocton.....	33,760	\$16 50
Crawford.....	22,041	24 27
Franklin.....	27,836	34 10
Gallia.....	23,485	10 98
Greene.....	17,540	45 22
Jackson.....	12,513	13 16
Licking.....	34,760	21 30
Morgan.....	26,680	15 70
Portage.....	21,369	25 84
Scioto.....	21,861	13 00
Shelby.....	18,423	18 00
Wyandott.....	15,364	12 10

Aggregate..... 275,922

Average..... 23,492 \$20 84

The average sales of land are 23,000 acres per county, at \$21 00 per acre, which gives an annual sale of 2,024,000 acres, at a commercial value of \$42,072,000. As the State contains 25,000,000 acres, it follows that in twelve years an amount of land is sold equal to the whole surface of the State.

2. TAXATION.—The following table shows the steps of the progressive rate of valuation and taxation, at intervals of four years:

	Aggreg. valuation.	Aggreg. taxation.
1847.....	\$ 410,760,100	\$2,842,062
1850.....	430,876,340	4,227,708
1855.....	860,877,354	8,954,511
1859.....	845,909,951	10,083,608

The following shows the distribution of taxes in the various years:

	1847.	1850.	1855.	1859.
Nature of tax.				
State.....	\$1,125,727	\$1,413,830	\$3,754,807	\$2,997,818
County.....			(2,702,303)	3,170,710
Town.....	1,357,499	1,895,892	(2,640,775)	3,414,990
Professional.....	8,569	9,303		
Sch. house.....	209,166	754,664		
Special.....	148,769	163,756	493,781	500,000
Delinq'os.....				

Aggregates \$1,842,002 \$4,227,708 \$8,954,511 \$10,083,608

Making now an analysis of all rates of increase in each department, we find the following ratios for the twelve years since 1846, when the new mode of taxation went into effect:

Increase of whole tax.....	255 per cent.
" " State.....	165 "
" " Local.....	320 "
Increased amount raised by the State.....	\$1,872,000
" " counties and towns.....	5,018,000

This statement is enough to show that the great increase of taxes, whether in amount or rate, has been caused by the local municipalities, and is mainly beyond the control of the Legislature. There are two points, however, to which the attention of the citizen will be called, to wit:

- What is the increase of the general rate, as it regards property?
- What are the objects on which the increase has been expended?

The increase of the aggregate rate has been, (on all property:)

	Mills.
In 1847.....	7
1840.....	9 1
1855.....	10 4
1859.....	12 60

This is certainly a considerable increase but quite different from the one presented in the former statement. This shows that the taxes have actually increased 72 per cent. instead of 255. Let us examine the increase in each department:

State Tax in 1847.....	2.8 mills.
" " 1850.....	3.3 "
" " 1855.....	3.2 "
" " 1859.....	3.5 "

A very slight increase of State taxation has taken place, amounting to but 7-10 of a mill, or 7-10,000 of a dollar. Let us now look at the local taxation.

	Mills.
Rate of Local Taxation:	
In 1847.....	3.9
1850.....	6 1
1855.....	6 2
1859.....	7 7

Here we see in another form, the great increase of local taxation. It has not only increased 300 per cent in amount by 100 per cent in the rate. Let us now deduct from the revenue raised by State taxation, the amount paid to schools and leave only the State Government and its incidental expenses. We have this result. In 1847 and 1850 there was no State school tax, and therefore no deduction to be made. Tax for State purposes:

1847.....	\$11,257 27
1850.....	14,138 30
1855.....	14,629 87
1859.....	16,459 91

If it be recollected that the canals have been the last two or three years a charge on the Treasury, it will be seen that the amounts raised for State purposes have been for the last ten years, nearly stationary. This will be seen by the following rates:

	Mills.
In 1847.....	2.8
1850.....	3.3
1855.....	1.7
1859.....	1.8

There is therefore, no citizen of Ohio who does not pay a less rate on the valuation of his property in 1859, than he did in 1847, for State purposes; although the actual sum of money raised for such purposes is greater. This being the fact, let me inquire

b.—On what objects the excess of money raised by taxation has been expended?

By the Auditor's report, we find them to be—

Debentures.....	\$1,055,119
Schools, School-houses and Libraries.....	2,740,000
Roads.....	405,352
Railroads.....	494,457
Bridges.....	401,147
Public Buildings.....	76,636
County Poor.....	290,376
" " Purposes.....	11,313,327
City, town and borough purposes.....	1,450,600
Township purposes.....	280,400
Speculative tax and forfeitures.....	800,000
General State revenue.....	590,870

The proportion for general objects show:

Interest and sinking fund.....	10 per cent.
State expenditures.....	6 "
Schools.....	28 "
Poor (including townships).....	4 "
County improvements.....	16 "
Counties.....	13 "
Cities, towns and boroughs.....	16 "

The whole amount of State expenditures, and interest on public debt, and the sinking fund, is but 16 per cent on the whole amount of taxation. The whole amount raised by State authority is but 29 per cent. of the whole amount of taxation.

The amount and distribution of taxes paid in 1859, were:

For State purposes, including interest on public debt and sinking fund.....	\$1,645,969
For School purposes.....	2,740,000
For local purposes (exclusive of schools).....	5,669,011
General Government, by customs duties.....	500,000

Paid by Ohio in 1859..... \$15,054,080

3. DEBTS OF RECORD.—The record debts for three years stand as follows:

	1857.	1858.	1859.
Amount.			
Mortgages.....	\$ 28,548,226	\$ 25,650,000	\$ 30,747,033
Judgments.....	7,500,000	9,587,000	9,745,313
R. R. mortgages.....	5,000,000	61,455,111	61,455,111

Aggregate..... \$51,048,226 \$96,693,111 \$101,948,457

In 1857 I apprehend several of the recorders included. Railroad mortgages, and if so, the mortgage debt of that year is several millions too much, and this I suppose to be the fact. So also the Railroad mortgages include the debts of three lines, the larger part of which lie out of the State. The entire amount of the mortgages are, however, recorded in this State, and are a charge on the property of the companies here. The subsisting debt of the 1st of January, 1860, was:

Record debt of 1858.....	\$25,050,000
" " 1859.....	30,747,033
Judgment debt of 1859.....	9,746,313
Railroad " ".....	6,455,111

Aggregate record debt..... \$127,548,457

The Railroad debt being deducted, leaves \$65,093,347 as a lien upon the landed property of the people, or an average of 11 per cent. on the appraised value of property in the State.

VIII. SOCIAL STATISTICS.

1. **NEW STRUCTURES.**—There was a falling off in 1859 of more than a thousand in the erection of buildings:

New structures in 1858.....	10,400
" " 1859.....	9,200

Aggregate of two years..... 19,600

2. **MARRIAGES.**—The marriages for three successive years, making allowance for counties not reported, (only one in 1850) were:

1857.....	22,490
1858.....	22,434
1859.....	20,505

The diminution which has taken place in some counties may be seen by the returns from Hamilton and Cuyahoga.

	Hamilton.	Cuyahoga.
1857.....	2,710	881
1858.....	2,606	828
1859.....	2,432	784

This diminution corresponds with the diminution in structures and town growth.

3. **WILLS AND ADMINISTRATIONS.**—The number of these in 1859 were:

Wills.....	2,013
Administrations.....	2,602

4. **NATURALIZATIONS.**—The naturalizations of the last two years were:

1858.....	4,601
1859.....	8,933

It will be seen that the naturalizations were nearly doubled in 1859. Their nationalities were as follows:

	1858.	1859.
England, Scotland and Wales.....	742	798
Ireland.....	595	1,881
Germany.....	2,313	4,720
All other.....	431	637

5. **CRIMES, AND THEIR PUNISHMENT.**—The statistics present this result:

	Against Person.	Against Property.	Against Statute.	Ind'm'ts Total.
1858.....	807	987	1,739	3,533
1859.....	637	966	1,643	3,493
Decrease.....	150	21	144	60

There is some discrepancy in details, from the want of discrimination, in a few cases, as to the offense. There are three counties wanting, only. The number of convictions were:

	In 1858.....	In 1859.....
This view of crime is not complete without taking into view the police offences of the cities. The following are the reports of the Mayors of		
Cincinnati.....	6,844	
Cleveland.....	1,478	
Columbus.....	245	

Police offences..... 85

6. **SUICIDES, MURDERS AND CASUALTIES.**—The reports for the last two years (estimating 11 counties not returned in 1859,) were as follows:

	1859.	1858.
Murders.....	50	60
Suicides.....	78	70
Casualties.....	275	310
	393	440

7. **STATISTICS OF EDUCATION.**—The following table shows the payments to schools from the sources other than the State tax, since 1853:

	Int. on spec. fund.	Local taxation.
1854.....	116,000	1,293,424
1855.....	136,179	1,246,346
1856.....	129,980	1,259,938
1857.....	141,402	1,418,097
1858.....	149,205	1,438,810

The following is a table of the total cost of Public Education, and the rate on the aggregate property:

Years.	Total amt. Funds.	Total amt. Property.	Per ct. mills.
1845.....	\$535,535	\$144,169,469	3 3/4
1850.....	551,039	439,966,340	1 1/4
1852.....	1,045,611	507,581,911	2
1853.....	2,319,329	593,396,848	3 5-6
1854.....	2,759,432	866,929,982	3 1-10
1855.....	2,749,917	860,877,354	3 1-5
1856.....	2,619,925	820,361,037	3 1-5
1857.....	2,822,100	849,414,579	3 1/2
1858.....	2,966,020	840,800,021	3 1/2

The following gives the number of enrolled pupils since 1850:

No. Co's.	Male.	Female.	Aggregate.
1850.....	236,827	184,906	421,733
1851.....	233,571	207,426	440,997
1852.....	240,252	197,560	437,812
1853.....	247,089	209,693	456,782
1854.....	257,547	211,477	469,024
1855.....	297,966	263,349	561,315
1856.....	320,386	292,961	613,347
1857.....	338,628	283,095	621,723

Exclusive of the Common Schools, there are within the limits of the State, Collegiate, Corporate, Private, Parochial education as follows:

1. Colleges, Universities.....	22
Instructors.....	129
Pupils in College classes.....	1,164
" preparatory.....	2,105
Aggregate of pupils.....	3,873
2. Academies and Seminaries, including Colleges for females.....	90
Instructors.....	404
Pupils.....	8,221
3. Private and Parochial schools.....	171
Teachers.....	315
Pupils.....	36,053
4. Aggregate.....	278
Colleges, Academies, &c.....	238
Instructors.....	848
Pupils.....	23,159

A BILL

TO ESTABLISH A COMMUNICATION BY RAILROAD AND TELEGRAPH BETWEEN THE ATLANTIC STATES AND CALIFORNIA, AND FOR OTHER PURPOSES.

SEC. 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That, to aid in the construction of a railroad and telegraph line from the Mississippi river to the western boundary of Texas, and from thence to the Pacific Ocean, there is hereby granted, on the terms and conditions hereinafter mentioned, to the Southern Pacific Railroad Company, chartered by the State of Texas, of which J. Edgar Thompson, of Pennsylvania, Vernon K. Stevenson, Samuel Tate, and Jephtha Fowkes, of Tennessee, James Guthrie, of Kentucky, Wm. H. Clement, of Ohio, John P. King, of Georgia, Charles T. Pollard, of Alabama, William C. Smedes, of Mississippi, John R. McDaniel, of Virginia, S. L. M. Barlow, of New York, R. W. Longhery, of Texas, C. Wilson, W. T. Scott, J. Robinson, and others, of Texas, are directors, their associates, successors, and assigns, every alternate section of land, to the amount of three alternate sections per mile on either side of said railroad and telegraph line, from the Mississippi river, south of the thirty-eighth parallel of north latitude, to the eastern boundary of the State of Texas, and every alternate section of land, to the amount of twenty-five alternate sections per mile on each side of said railroad and telegraph line, from the western boundary of Texas, on the most eligible route to the eastern boundary of California, in the direction to San Francisco; and from thence, to the amount of six alternate sections per mile on each side of said railroad and telegraph line, on the most eligible route to the Pacific Ocean, at or near San Francisco. And this road shall pass over the Rocky mountains south of the thirty-fourth parallel of north latitude.

SEC. 2. *And be it further enacted,* That, to aid in the construction of a railroad and telegraph line from the Missouri river, commencing north of the thirty-eighth (38) parallel of north latitude, and thence on the most eligible route to the Pacific Ocean, a grant of lands is hereby made, upon the terms aforesaid, to William H. Swift, of Massachusetts; Erastus Corning, and J. T. Souler, of New York; George W. Cass, of Pennsylvania; S. S. L'Hommedieu, of Ohio; Morris, of Indiana, Benjamin H. Latrobe, of Maryland; William B. Ogden, of Illinois; Charles Mason, of Iowa; Brooks, of Michigan; John O'Fallon, John How, and Robert Campbell, of Missouri, and their associates, successors, and assigns, every alternate section of land, to the amount of six sections per mile on each side of said railroad and telegraph line, for the distance of five hundred miles from the Western boundary of the State of Iowa or Missouri, on the most eligible route towards the pass selected therefor over the Rocky mountains; and from the end of said five hundred miles, to the amount of twenty-five alternate sections per mile on each side thereof, on the most direct eligible route to the eastern boundary of the State of California, in the direction of San Francisco; and from said eastern boundary, to the amount of six alternate sections per mile on each side of said railroad and telegraph line, on the most direct eligible route to the Pacific Ocean, at or near San Francisco, with a branch and telegraph from the nearest practicable point on said main railroad to the navigable waters of the Columbia river, at or near its mouth, or to Puget's sound; to aid in constructing which, a like grant of land to said company to the amount of ten alternate sections per mile on each side of said branch railroad and telegraph line is hereby made.

SEC. 3. *And be it further enacted,* That said railroad companies herein provided for are authorized to adopt, as part of their respective lines of road, any line of railroad now being constructed, or that may be constructed, east of the points from which said companies receive herein an appropriation of lands, and west of the Mississippi river, and to form a union or junction therewith, and to construct, use, and operate the same when constructed, under such articles of organization, not inconsistent with the Constitution and laws of the United States, as the parties thereto may mutually adopt; and said Southern Pacific Railroad Company may make such arrangements and junction with any road or roads in the State of Texas.

SEC. 4. *And be it further enacted,* That so far as lands are granted by this act to aid in the construction of said railroads within the State of California, the same shall be of no effect unless the said State of California shall, by some legislative enactment duly passed, declare her assent to the construction of such railroad within said State according to the provisions of this act; and this provision shall apply to every State in which any part of the railroads mentioned in this act are situated. And in all cases where the United States have disposed of any of the alternate sections granted

by this act, or for any other reason can not convey title thereto, or where the same shall be condemned by the United States surveyor as worthless, (and his decision shall be approved by the Secretary of the Interior,) or where the same shall be mineral lands in California, (which are hereinafter excepted from the operations of this act,) the deficiency shall be made up by other sections from the nearest unappropriated public lands belonging to the United States to which none of the aforesaid objections apply. And the alternate sections granted by this act shall in all cases, when surveyed, be those designated by odd numbers; *Provided,* That so soon as this act is passed and accepted by the companies undertaking to build the roads, it shall be the duty of the President of the United States to cause the public lands for forty miles on each side of so much of said roads as the companies shall indicate, to be withheld from settlement and occupation until the lands shall have been surveyed and the alternate sections selected, as provided for in this act: *And provided,* That the Southern Pacific Railroad shall, under no circumstances, receive more than six sections of land per mile for that portion of their road lying between the Mississippi river and the eastern boundary of Texas.

SEC. 5. *And be it further enacted,* That each of the grants aforesaid to the companies aforesaid, respectively, is made on the terms and conditions specified in this act, and on condition that said several companies assent to the same and comply therewith; and that said companies shall severally construct a railroad and telegraph line as required by this act upon the routes respectively designated, as near as may be practicable, in a good, substantial and workmanlike manner. Said railroads to be made with all necessary drains, culverts, viaducts, crossings, sidings, bridges, turn-outs, watering places, and all other equipments, furniture, and appurtenances of a first class railroad, with rails of a good quality and size, the rails to weigh not less than sixty-four pounds to the yard, and to be of American Iron, if they can be had at no greater cost than other rails, with due reference to quality, and with a uniform gauge upon each of said roads. Said telegraph line on each of said roads to be constructed in the most approved and workmanlike manner.

SEC. 6. *And be it further enacted,* That the government of the United States shall at all times have the preference in the use of said railroads and telegraph lines for postal, military, and all other purposes, paying for postal service such sums as the Postmaster General may authorize and prescribe; and for such other service as may be rendered, such sums as the Secretary of the department in behalf of which said service may be rendered shall prescribe and authorize: *Provided,* That said compensation for postal service shall not be more than that paid for similar services to first class railroads in the United States: *And provided further,* That the roads provided for in this act shall carry over each section as it is finished, and over the whole roads for twenty years after their completion, under the direction of the proper departments, all military and naval supplies, troops, seamen, government agents, and freight of all kinds for government purposes, with the limitation that the price to be paid shall not exceed, in any event, in peace or in war, the sum which in time of peace has been paid for transportation by first class railroads elsewhere in the United States.

SEC. 7. *And be it further enacted,* That whenever either or any of said companies shall have constructed fifty miles of either of said main railroad and telegraph lines, and shall have supplied the same with all the necessary rolling stock, buildings, and depots, for the use thereof, of suitable quality for said roads, and shall report the same to the President of the United States, it shall be the duty of the President to appoint immediately a commissioner who shall examine the same and make report to him in relation thereto; and if it shall appear by said report that fifty miles of said main railroad and telegraph lines, of either company, have been completed in a good, substantial, and workmanlike manner, and supplied with all necessary rolling stock, buildings, and depots, for the use of said roads, and are in good working order, then it shall be the duty of the Secretary of the Treasury, under the direction of the President, to issue to the company or companies that may have completed said fifty miles of main railroad and telegraph line or lines the bonds or treasury notes of the United States for the sum of one million of dollars, according to the stipulations hereinafter provided, and deliver the same to the said company or companies; and the said company or companies shall thereupon execute a mortgage or mortgages upon said fifty miles of railroad and telegraph line or lines to the United States, whereby the same shall be mortgaged to the United States, free from all lien or incumbrance, with all the rolling stock, buildings, and depots, and including also all the purchases made of materials or outfits, and work done and to be done on said fifty miles, to secure to the United States the payment of said one million of dollars in the manner hereinafter provided for; and for each and every fifty miles of said railroad and telegraph lines so completed and put in running order, the Secretary of the Treasury shall issue to said company or companies completing the same the like sum of one million of dollars in the bonds or treasury notes of the United States, upon the execution by said company or companies of a mortgage, as aforesaid, upon the said fifty miles of railroad and telegraph line or lines then completed, until reaching the base of the Rocky mountain; and after that, the sum of two millions of dollars for every fifty miles, until bonds or treasury notes shall have been issued to the amount of thirty-five millions of dollars to each of said two main lines of railroad and telegraph when no more bonds or treasury notes shall be issued: *Provided,* That no loan shall be asked from the United States government by the Southern Pacific Railroad Company for any portion of their road lying within the limits of the State of Texas, and no mortgage given to the United States on the same; but the loan to said road shall be applied to the portions of said road lying east and west of the State of Texas. And each of the companies undertaking to construct the respective roads provided for in this

bill, shall agree to build five hundred miles of their respective roads within six years after the passage of this act and its acceptance by said companies. And to this end the construction of the same may be begun on the Pacific side as early as on the Mississippi and Missouri rivers. And when five hundred and fifty miles of either of said main lines of railroad and telegraph shall have been completed and approved in the manner hereinbefore provided, the said several companies constructing said railroad and telegraph lines shall have the lands hereby granted conveyed to them, respectively, by patent for fifty miles of said line or lines, continuously, to the amount allowed by the terms of this act for such fifty miles; and so on, fifty miles of land for each fifty miles of railroad and telegraph line completed by said companies, beyond the five hundred and fifty miles first finished, until said railroad and telegraph lines shall be entirely completed; and when either of said roads shall be completed, the said companies shall be entitled to patents for the whole of the lands to which they are entitled by the terms of this act, leaving the mortgages aforesaid upon the bed or beds of said road or roads, and all the rolling stock, buildings, and depots thereof, as security for the payment to the United States of the amount of the bonds or treasury notes issued as aforesaid, until the whole thereof shall be paid to the United States in mail and other services, according to the provisions of this act: *Provided*, That the companies receiving lands by this grant from the government of the United States shall sell and alienate one-half of said lands within five years from the date of the patents to the same, and the rest of said lands so granted to the companies within ten years from the date of the patents to the same; and all lands not sold at the end of ten years from the date of the patents to the same shall revert to the government of the United States.

Sec. 8. *And be it further enacted*, That if either of the companies authorized to construct either of the two main railroad and telegraph lines mentioned in the two first sections of this act shall fail to complete the whole of its railroad and telegraph line within twelve years after the passage of this act, and its acceptance by the companies, (unless the same shall be enlarged by Congress,) said failing company shall forfeit all the rights and privileges granted by this act as to all its line of railroad and telegraph not then completed, and all grants of land therefor. And said lands thus forfeited may be granted by Congress to any other company, the same as if this act had not been passed, to aid in completing said railroad and telegraph line; and Congress may place the management of the whole of each or either of said two main railroads and telegraph lines, thus forfeiting their lands, so far as the same may have been constructed by the aid of the United States government herein provided, under the exclusive control of the companies undertaking to complete the same, on such terms in regard to said failing companies, respectively, as it may deem just and proper, and Congress reserves the right so to do by this act, in order to insure the completion of the said main railroads and telegraph lines.

Sec. 9. *And be it further enacted*, That each of the companies engaged in constructing the two main railroads and telegraph lines aforesaid shall annually, during the construction thereof, make a full report to the Secretary of the Interior, verified by the oath of the proper officers or agent of said companies, respectively, of the condition and progress of said work, of the distance of railroad and telegraph line completed, and the cost of the same, and the distance in course of construction, and the cost so far of the same, of the estimated value of the lands unsold, of the amount of money and property on hand, and of the amount received from the road, and of all the cost and expenses of the construction thereof up to the time of making said report for the preceding year. And said reports shall be continued annually after said roads and telegraph lines are completed, showing the annual income and expenditures thereof by items after that time, together with a statement of the lands remaining unsold and the estimated value thereof, and of the lands sold and the amount received therefor; and a general statement of the condition of said railroad and telegraph lines and of the income and expenditures thereof for the year preceding.

Sec. 10. *And be it further enacted*, That said companies owning or managing said railroads and telegraph lines shall keep the same in good order and repair, and shall not permit any unreasonable delay in the transportation of mails, troops, or military stores, or of persons or property on said railroads, or on the transmission of intelligence by said telegraph lines; and in case either of said companies shall permit or allow any such unreasonable delay, or permit or allow said railroad or telegraph line to remain improperly out of repair, such company shall be subjected to such fines and penalties therefor, as the department whose business has been so neglected may see fit to impose.

Sec. 11. *And be it further enacted*, That the Secretary of the Interior shall cause the lands to be surveyed after the routes shall be fixed, on the lines of said roads, so far as necessary, as fast as may be required by the construction of said several railroads; and the lands granted by this act to the railroads shall not be liable for sale, (except by said company,) or entry, or pre-emption, before or after they are surveyed. And the reserved sections of the government (designated by even numbers) on the several railroads provided for in this act shall not be sold for less than double the minimum price of the public lands. But the same shall be subject to pre-emption the same as other lands allowed to be pre-empted in all respects, except to be paid for at such double price; and said reserved sections may also be located by land warrants issued by the United States at the same double price, to-wit: one-half the number of acres named in said warrants.

Sec. 12. *And be it further enacted*, That the right of way is hereby granted for each of said railroads to the several companies constructing the same to the extent of one hundred feet in width on each side of each of said railroads in the same manner in all other respects as provided by law in other cases, including all necessary grounds for

station buildings, workshops, and depots and so forth; and the right of way shall be exempt from taxation within the Territories of the United States. The United States shall extinguish as rapidly as may be the Indian titles to all lands falling under the operations of this act, and required in the donation to the two main roads named in this bill.

Sec. 13. *And be it further enacted*, That all minerals of gold and silver, within the State of California, shall be, and are hereby, reserved and excepted from the operation of this act; but to aid in the construction of said railroads and telegraph lines, said companies may, respectively, take and use earth, stone, timber, and other materials, from any lands adjacent to said railroads, respectively, belonging to the United States.

Sec. 14. *And be it further enacted*, That the bonds or treasury notes authorized to be issued by the provisions of this act shall be made payable to bearer, and redeemable at the Treasury of the United States in — years from the date thereof, bearing interest at the rate of five per cent. per annum, payable semi-annually at the Treasury of the United States; and if bonds be issued, they shall be coupon bonds.

GRAIN AND FLOUR RECEIPTS OF THREE PRINCIPAL POINTS.—The following is a comparative statement of the deliveries of Grain and Flour at New York, Buffalo and Chicago for the year 1859, the receipts at Buffalo including only what came by lake during the season of navigation. If the receipts by the Lake Shore and the Buffalo and Lake Huron Railroad were added, the aggregate would doubtless reach 26,000,000 bushels:

	N. York.	Buffalo.	Chicago.
Flour, barrels.....	3,625,082	1,415,482	731,000
Wheat, bushels.....	4,491,144	9,134,330	8,815,000
Corn, ".....	2,200,544	3,225,979	5,410,000
Gats, ".....	8,007,000	1,372,296	1,813,000
Rye, ".....	549,000	161,233	287,000
Barley, ".....	2,114,000	580,075	478,000
Total.....	18,361,688	15,859,295	16,114,000
Reducing Flour to—			
Wheat.....	16,312,869	6,369,669	3,114,000
Total.....	34,674,357	22,259,064	19,228,000

These receipts of New York do not include the deliveries of flour by the Camden and Amboy Railroad, which we estimate at 200,000 barrels per annum; nor a great proportion of the corn by the Jersey, Delaware and Virginia coasters; nor the black oats from Prince Edward's Island; nor the deliveries by wagons from New Jersey and Long Island; nor by the Long Island Railroad; nor the deliveries of buckwheat flour, no inconsiderable item; nor any portion of the corn-meal from New Jersey, Maryland and this State; nor of Canada peas, which have competed with wheat for export.

RAILROAD MEETING.

A portion of the citizens of Macon county, met in Macon City, December 23d, to discuss the propriety of constructing a railroad running from Alexandria, in Clark county, to the Junction at Macon City, in Macon county. The meeting was called to order by Hon. F. Rowland acting as President, and James A. Terrill, Vice-President. B. E. Harris and Geo. S. Palmer, were assigned the duties of Secretaries. Col. Thos. P. Rubey was called on and briefly explained the object of the meeting, after which Col. Pratt, of Knox, J. T. Reister and himself were appointed a committee to offer resolutions expressive of the feelings of the meeting. The meeting was ably addressed by the following gentlemen, in behalf of the proposed road: Col. Rubey, Capt. Benj. E. Harris, Geo. S. Palmer, Wilsey, of Keokuk, and Col. Warner Pratt, of Knox. A motion was made that a committee of three be appointed to petition the Macon county court for a donation sufficient to defray the expense of a survey through the county. The committee appointed were James A. Terrill, Capt. Benj. E. Harris and Ludwell Evans. The Chair appointed the following gentlemen solicitors of stock of said

Road. James A. Terrill, Benj. E. Harris, Geo. S. Palmer, T. P. Rubey, A. Larabee, T. T. Barnes, Capt. Wm. Griffin. The following resolutions were adopted:—

WHEREAS, The time has come when the interest of the people of Macon, Clark and Knox counties and the public generally imperiously demand the construction of what is now called the Alexandria and Bloomington Railroad, which will form a connection link between the great railroad system already inaugurated in the State of Missouri, Iowa and Illinois; and whereas, the present seems to be the most propitious time for commencing this great work. Therefore, be it

Resolved, That in our opinion, the projected road of which the survey is now already being made for Alexandria to the Junction of the North Mo., with the Han. and St. Jo. Railroad, is not only feasible, but that that we have the utmost confidence in its early construction.

Resolved, That all that is now necessary to secure the completion of this enterprise is the united efforts of the people along the line of the proposed road and in order that we may have our cherished hopes more fully and speedily realized, we most heartily recommend our citizens both of our towns and county to lend such material aid as will secure the construction of the road bed through this county to the junction of the two roads now running through our city.

Resolved, That the construction of this road would do more to develop the almost inexhaustible and natural resources of North East, Missouri, and to facilitate travel and transportation between North East Mo., Kansas and Nebraska on the one hand, and the whole North and East on the other, than road that has been projected in our State.

Resolved, That our system of railroads is incomplete with this connecting link. This road, fed and cherished by the Keokuk, and Fort Des Moines and Keokuk, Muscatine and Mt. Pleasant Roads in Iowa, and the Wabash and Mississippi and Winaw and Rockford on the North East. In fact with all the great system of Railroads North through Iowa to St. Paul and Illinois to Chicago, making direct connections with the Hannibal and St. Joseph and North Missouri on the South and West, being the shortest route from Chicago over Hannibal and St. Joseph road to the Missouri river and the far West; also the shortest and most direct route from Keokuk and St. Paul over the North Missouri Road to St. Louis.

Resolved, That through the connections made by this road, St. Louis can control all the trade of Iowa and Minnesota that she can possibly do by any railroad connecting with the North Mo. at its Junction the Hannibal road, and Keokuk and Fort Des Moines and Keokuk and Mount Pleasant roads at Keokuk. Both passing entirely through the State of Iowa and Minnesota in a North-westerly direction. Fed by all the roads in Iowa running East and West.

Resolved, That we ask the hearty co-operation of the city of St. Louis in the extension of the great North and South line of Railroads, the last connecting link between St. Paul and St. Louis.

Resolved, That in the opinion of this meeting the stock in such railroad would yield a handsome profit.

Resolved, That the county court be requested to make an appropriation of a sufficient amount to make the necessary preliminary surveys through Macon county.

Resolved, That the Books be opened immediately for subscriptions to the capital stock of said company.—Hannibal Messenger.

DECEMBER REPORT OF THE RECEIVER OF THE CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD.—WM. KEY BOND, Esq., Receiver of the Cincinnati, Wilmington and Zanesville Railroad, made his eight monthly report to the United States Court yesterday, embracing the operations of the road for the month of December. From this report, (for a copy of which we are indebted to JOHN McLEAN, jr., Clerk of the Court,) we compile the following figures:

Gross Earnings for December.

For Passengers—	
Through business.....	\$79 13
Local.....	4,388 60
Mail.....	859 95
Express, &c.....	448 57— \$5,776 25
or Freight—	
Through business.....	\$307 38
Local business.....	12,730 76—\$13,038 14

Total gross earnings..... \$18,814 39

EXPENSES.

Total ordinary expenses.....	\$11,166 54
“ extraordinary expenses.....	1,681 91
Capital, &c.....	499 67

Total expenses..... \$13,358 12
Total receipts..... 18,814 39

Net earnings for the month.....	\$5,476 27
The amount of liabilities due the road, which have accrued during the present Receivership, and remaining uncollected.....	\$12,745 13
Same item at close of November.....	8,405 98

Increase of amount due..... \$4,339 15

The total gross earnings of this road in November, as compared with the last month, were as follows:

Earnings in December.....	\$18,814 39
“ “ November.....	15,486 95
Total increase.....	\$3,327 44

The comparative expenses of the two months give the following figures:

Expenses in December.....	\$13,358 12
“ “ November.....	12,494 37
Increase in expenses.....	\$864 75
Deducting this sum from the increase in the receipts, and a net gain in the earnings is shown for the month over November of...	\$2,463 69

GREENVILLE AND MIAMI RAILROAD EXTENSION.—The Journal says: We learn that an informal meeting of several prominent citizens of Dayton was held at the office of the Greenville and Miami Railroad Company, last evening, where an interview was held with Judge Smith the President of the Cincinnati, Union and Fort Wayne Railroad Co., in regard to the completion of that Road from Union to Portland, the county seat of Jay County Indiana.

Judge Smith stated to the meeting that the citizens of Jay County had taken hold of the matter with commendable energy and subscribed to the stock of the Company to the amount of \$25,000. The company upon the subscription, felt called upon to make an effort to raise the required sum for its completion, and as the city of Dayton is directly interested in reaching the trade of Jay, and the adjoining counties he was therefore desirous of conferring with some of the gentlemen of this city who are familiar with the business relations of that section of country with the city of Dayton, and after a free interchange of views a committee was appointed consisting J. L. Miller, C. Helchelrode and J. B. Olwin, to present this enterprise to our citizens. This committee, will call in person upon the business men and citizens generally, and see what can be done towards making the required amount, we can but believe they will meet with friendly feeling and material aid.

THE FINEST RAILWAY CARRIAGE IN THE WORLD.

A state carriage for the Viceroy of Egypt was completed on January 6, by Messrs. T. W. Wason & Co., of Springfield, Mass. This house had already furnished forty passenger cars for the Egyptian Government's Railway, extending from Alexandria to the Red Sea, some 275 miles. Among them was a first-class sixteen-wheeled car, which upon trial, proved so easy and comfortable as to decide the order for the State Carriage, while the general character of the work was so satisfactory as to induce another large contract, which they have filled.

The State Carriage, the sixty-first of this manufacture for the Egyptian line, is probably the finest railway carriage in the world, considering both its remarkable size and its elaborate finish. The cost has exceeded \$10,000.

In general appearance the carriage resembles a long American passenger car, with an open space or platform in the middle, which is simply roofed over. Its total length, including end platforms, etc., is sixty-seven feet or nearly twice that of the common passenger car. The length of the carriage proper is sixty feet, the two end compartments being each twenty feet long, ten feet wide, and six inches higher than the ordinary car, leaving in the middle an open pavilion twenty feet long. Each of the inclosed compartments is a separate construction, and may be lifted off from the main platform and separately boxed. The roof of the pavilion or middle portion is also detachable and the main platform, composed of continuous stringers, four by nine inches and sixty feet long, together with the short cross stringers, may be taken apart and packed in a small compass. The above joints and separate structures were of course designed to allow convenient handling and transportation, and do not injure the appearance or strength of the whole fabric. Under four of the longitudinal stringers of the platform or floor are iron truss bolts, which, by their tensile strength, sustain the center portion, the stringers acting as compression pieces—the whole forming a very stiff girder. The bottom stringers of the two end compartments are two by six inches in size, have a separate floor, and lie flat upon and are bolted to the main frame. Iron bars, two and a half by three quarter inches, connect the end compartments together, and form the plate or roof beams of the central pavilion. Over each of these iron beams is placed a stiff compression piece of wood. The iron posts holding up the roof of the pavilion are hollow, bolts passing through them and binding the whole top and bottom construction together. The mechanical design of the end saloons does not differ much from the common practice.

The body rests upon two double trucks, having in all sixteen wheels. They are composed of two short four-wheeled trucks in a common frame, the car resting upon the center of this frame. Thus the irregularities of the track are reduced by the compound lever, so that an obstacle which lifts one wheel half an inch, will lift the center of its four-wheeled truck but a quarter of an inch, which will lift the center of the common eight-wheeled truck frame one-eighth of an inch, which will lift the center of the carriage one-sixteenth of an inch—or would so lift it, did not the motion pass through three sets of springs, which reduces it practically to nothing. The springs are of rubber, which will probably answer well enough in that climate. The swing beam is placed in the frame connecting each pair short trucks, immediately under the body of the car.

Such has been the State of our railways that

the equalization and elasticity of our car-trucks have naturally been pretty thoroughly worked out, to allow any locomotion at all, at high speeds, while the better tracks of Europe have not demanded such easy running gear. If we did but believe it, we could better afford an easy car on a Continental track than Eastern Monarch could afford the usual American system. Luxury and economy go hand in hand for once.

The total weight of the running gear is seven tons, and of the whole carriage about twenty tons, which is not excessive. Some of the great Erie cars weigh eighteen tons. The total distance from center to center of the bolsters resting upon the trucks is forty-three feet three inches. From center to center of the small trucks composing each double truck is nine feet three and a quarter inches; from center to center of wheels of small trucks is three feet seven and a quarter inches, and the wheel-base of each double truck is twelve feet eight inches. The Wason plate wheel, thirty-three inches in diameter are used. The eight axles are each four and a half inch diameter, with bearings three and a quarter by six inches. The axle-box is on the "Lightner" plan in its general feature, with a tail-box above, after the English fashion. The gauge of the road is four feet eight and a half inches.

PORT ROYAL RAILROAD.—NO. 3.

The proposal at the present time is to run the road from Saltcatchie to Augusta, as near as possible by an air line. In its route it will pass the upper part of Prince William's Parish, in Beaufort District, and through the whole western portion of Barnwell District, along the valley of the Savannah river. Continuing its course, it will cross the southwestern portion of Edgefield, and strike the Savannah river at Sand Bar Ferry. Crossing that stream, it will reach the suburbs of the city of Augusta, by a road of three miles in length along the Georgia side of the river. If those who are interested in this railroad project will look at the map of South Carolina and Georgia, they will see that this route has no stream to cross from its junction with the Charleston and Savannah Road until it reaches the Savannah river, near Augusta. It will run, in the first instance, upon the ridge between Coosawatchie and the Saltcatchie; and when it has reached the headwaters of the Coosawatchie, it will then take the ridge along the line of the Savannah river. There is probably no better position for a Railroad in South Carolina than this route. It requires no bridging, and but little trestle work—its course is parallel with and not across the streams that flow towards the sea; hence this road can be as cheaply built as any other road in the country. By this line it will avoid the heavy grades that have been found so difficult to overcome in the vicinity of Aiken, upon the South Carolina Railroad. It will leave the rolling country to the east, and take that level plain above the freshet line of the Savannah river valley. With a level country—with but few and insignificant swamps to encounter, and a vast abundance of the very best timber for railroad construction that the world affords, nothing is wanting but energy and capital to carry forward this enterprise. Can the country through which this road is to pass furnish its just proportions of these two important essentials? Without hesitation, I reply that it certainly can. This section of South Carolina is one of the most prosperous portions of the State. The cultivators of short cotton in this region, with scarcely an exception, by their

own industry, skill, and energy, have accumulated large amounts of property. No portion of South Carolina is so well to do; no portion of South Carolina is so competent, or so well able, to assist in furnishing an outlet to all its varied products as this portion is. The only access to market now enjoyed by these thrifty citizens is through the uncertain communication of the steamers of the Savannah river, and this means only affords them a single outlet to the city of Savannah. A railroad would give them a choice of markets. Charleston and Savannah both upon the seaboard, and Augusta in the interior, would each be of easy access to the people of this section. If the people of this section of South Carolina, with the hitherto insufficient means of access to the great marts of trade, have been able to acquire so much prosperity for themselves, how will they be able to compute the greater prosperity that must arise when they will have the additional advantages of seeking the market that is most competent to give them the best prices for their products. The comforts, the luxuries, and all the benefits that are the attendants of modern progress and civilization, will be brought to their own doors. Their contact with the great outer world will be complete, and the facilities of egress and ingress which this road will furnish them, to and from their homes, will raise the value of their lands. And should they never receive a dollar of dividends for their investments, these benefits alone would more than compensate them for the outlay that they would have made for its construction.

While this enterprise may be of benefit to others, it must be of especial and of paramount benefit to the people who reside along the line of its proposed construction. Let them, therefore, go to work with the determination to build this road, let them do their duty, put their shoulders to the wheel, then cry to Hercules, and he will be found both ready and willing to help them. The charters have been obtained, the subscription books are opened, the Commissioners have been appointed. Let every come forward and do his duty, and when he has done this, then, with a good grace, and a loud voice, will he be able to call on Charleston and Augusta to help the enterprise. E.
—*Charleston Mercury*.

MACON AND WARRENTON RAILROAD.—The Milledgeville *Federal Union* says: We believe the people of Augusta have at last waked up and discovered that they have been sleeping over their vital interests. They now begin to see that it would be of considerable importance to them to have the Macon and Warrenton Railroad built; they have discovered that the trade of Middle, Western and Southwestern Georgia is worth contending for. When, a few years ago, the people of Charleston, and of Hancock, Baldwin, Jones and Bibb were aroused to the importance of this enterprise, the people of Augusta were lukewarm, and a majority of the directors of the Georgia Railroad were actually hostile to us. But let the past rest; we must look to the present and the future; and if the people of Augusta are now ready to put their shoulders to the wheel, let us all, the people of Warren, Hancock, Baldwin, Jones and Bibb, rally with them, and with all our might help to push on the enterprise. We believe the citizens of Charleston, and the directors of the Charleston and Hamburg Railroad, have for many years been convinced of the importance of this enterprise, and have been ready and willing to contribute their full proportion towards the expense, and the liberal promises lately held out by the Charleston merchants to country merchants, greatly enhance

the importance of this road, both to them and to us in the interior. We have never doubted, that this important link in the chain of travel from North to South would eventually be built. It is a public necessity, and the sooner it is built the better for all concerned. We believed also that when it is built, it will be one of the best paying roads in Georgia. We have good reasons for this opinion, founded on the calculations of men well acquainted with railroad enterprises. We hope all interested in the road will now assist the people of Augusta while they are in the humor.

MONETARY AND COMMERCIAL.

Since our last there has been a continued tendency towards ease in the money market, and with the exception of one or two days the offerings have been quite moderate and within the scope of the means of the discount houses. The demand for money, however, is fully equal to the supply to be found in the regular channels, yet the banks are all able to do all the acceptable paper that is presented by their customers. Regular rates remain as heretofore quoted 10@12, while outside rates may be fairly quoted at 15@18 per cent.

Eastern Exchange is firm at $\frac{1}{2}$ prem. for banker's checks, and the demand for the past day or two has been somewhat in excess of the supply. New Orleans is more abundant; and there being but a very limited demand, rates rule a shade lower. Buying prices $\frac{1}{2}$ prem., selling $\frac{3}{4}$ prem. Quotations are:

	BUYING.	SELLING.
New York Sight.....	@ $\frac{1}{2}$ prem.	@ $\frac{1}{2}$ prem.
Boston.....	@ $\frac{1}{2}$ prem.	@ $\frac{1}{2}$ prem.
Philadelphia.....	@ $\frac{1}{2}$ prem.	@ $\frac{1}{2}$ prem.
Baltimore.....	@ $\frac{1}{2}$ prem.	@ $\frac{1}{2}$ prem.
New Orleans.....	@ $\frac{1}{2}$ prem.	@ $\frac{1}{2}$ prem.
American Gold.....	25@30	@ $\frac{1}{2}$ prem.
Missouri funds are bought at $\frac{1}{4}$ dis.		
and Illinois at 2@2 $\frac{1}{2}$ dis.		

Relative to Stocks, the *Tribune* of Monday says, that the share dealings of to-day were not large, except in New York Central, Galena, and Rock Island, and there is but little to say in regard to these stocks which has not been repeated day after day during the week. The pro-rata and toll bills are still the obstacles to a recovery in the market value of New York Central, and prices vary from day to day according to the hopes and fears of operators, and upon the whole keeping at about the figures which have ruled during the last fortnight. A moderate gain in the earnings of the Western roads, reported within a few days, has given those stocks a little more strength, but they seem to lack outside support—an essential element in any substantial improvement.

Prices at the Second Board were generally a shade lower, and the market was rather dull. The closing prices were: for Virginia 6's 92@92 $\frac{1}{2}$; Missouri 6's, 80 $\frac{1}{2}$ @80 $\frac{1}{2}$; Canton Company, 17@1 $\frac{1}{4}$; Pacific Mail, 78 $\frac{1}{2}$ @78 $\frac{1}{2}$; New York Central Railroad, 74 $\frac{1}{2}$ @74 $\frac{1}{2}$; Erie Railroad, 81 $\frac{1}{2}$ @81 $\frac{1}{2}$; Hudson River Railroad, 40 $\frac{1}{2}$ @41 $\frac{1}{2}$; Harlem Railroad, 9@9 $\frac{1}{2}$; Reading Railroad, 38 $\frac{1}{2}$ @38 $\frac{1}{2}$; Michigan Central Railroad, 37@37 $\frac{1}{2}$; Michigan Southern and Northern Indiana, 5@5 $\frac{1}{2}$; do. Guaranteed, 12 $\frac{1}{2}$ @12 $\frac{1}{2}$; Panama Railroad, 130 $\frac{1}{2}$ @130 $\frac{1}{2}$; Illinois Central Railroad, 53 $\frac{1}{2}$ @53 $\frac{1}{2}$; Galena and Chicago Railroad, 58 $\frac{1}{2}$ @58 $\frac{1}{2}$; Cleveland and Toledo Railroad, 19 $\frac{1}{2}$ @20; Chicago and Rock Island Railroad, 62 $\frac{1}{2}$ @62 $\frac{1}{2}$; Illinois Central 7s, 87 $\frac{1}{2}$ @88 $\frac{1}{2}$.

The earnings of the Buffalo, New York and Erie Railroad (Buffalo to Corning) for the month of January, 1860, compared with the same month of last year, were as follows:

	1859.	1860.
Passengers.....	\$8,789 69	\$7,598 73
Freight.....	26,990 79	24,802 78
Other sources.....	4,866 85	1,586 85
Total.....	\$37,367 32	\$34,083 36

The following are the Earnings of the Indianapolis and Cincinnati Railroad for January:

January, 1859.....	\$40,750
January, 1859.....	30,384
Increase.....	\$10,366

During the month of January, a larger freight was done than ever before in the history of the road.

BUFFALO AND STATE LINE RAILROAD.—The Buffalo & State Line Railroad has declared a semi-annual dividend of five per cent., payable 15th of February. The result of the year's business has been as follows:

	Earnings.	Expenses.
1858.....	\$9,18,476 28	\$545,678 02
1859.....	833,407 42	411,703 60
Total.....	\$100,068 86	\$133,972 72
		100,068 86

Decrease of expenses over decrease of earnings.....	\$33,903 46
The floating debt on 26th Jan., 1860, was..	227,357 57
Deduct cash and bills receivable.....	143,004 16

Leaving..... \$84,203 41

The interesting fact in the above statement, is the decrease of expenses over the decrease of earnings in the past year.

GRAND TRUNK RAILWAY OF CANADA.—Audit Office, Montreal, January 27, 1860.—Statement of Traffic Receipts for week ending Saturday, January 21, 1860:

Local Passengers 7,587.....	\$12,411 21
Foreign Passengers, 1,155.....	2,017 01
Emigrants do.....	
Mails, Express, etc.....	2,776 11
Local Freight and Live Stock, 6,423 $\frac{1}{2}$ tons.....	23,295 16
Timber and Lumber 1,340,352 feet, 1,229 tons.....	2,632 36
Firewood, 1,412 cords, 2,117 tons.....	1,069 10
Foreign Freight, etc., tons 1,640 $\frac{1}{2}$	5,356 03

Total....(970 miles).....	\$40,097 58
Week ending Jan. 22, '60, (880 miles).....	39,932 53

Increase..... 90 "\$10,165 05

Total traffic from July 1st, 1859, to date.....	\$1,525,708 13
For same period last year.....	1,287,587 03

Mileage and Receipts of St. Thomas Branch are not included in this return.

JOHN HARDMAN, Auditor.

DON'T TAKE A HINT.—Scene—Depot, Twenty-seventh street, N. Y., waiting for cars to leave for Hartford. Up drives the coach from the new and splendid Fifth Avenue Hotel. Passengers alight. Porter tugs away at three big trunks, gets them checked, and hands the check to a gentleman standing by who, without so much as a nod, drops them into his capacious breeches pocket, and walks up in front of the depot, taking a survey of all going on. Hotel porter follows—tries to catch his eye—this way and that way—no go—finally plants himself plump before him, hat in hand, a pleasant smile on his countenance, and touching the gentleman's elbow, says: "Sir, I am the porter of the Fifth Avenue House." The gentleman looks at him all over. "Are you? Glad to hear it—a first rate situation—hope you will be able to keep it!" and with eyes elevated, moves off. Not a muscle stirred—porter perfectly petrified—train leaves.—*Hartford Press*.

SEVERE PUNISHMENT OF GOVERNMENT PECULATIONS AND DISHONEST AGENTS.—At the conclusion of last year the Emperor of Russia appointed a military tribunal, with General Mouravieff as President, to try the individuals charged with robbery or negligence in supplying the army of the South and the army in the Crimea with provisions during the war against the allied armies of Great Britain and France. This tribunal has just closed its sittings, and has passed a severe sentence. A great number of individuals employed in the commissariat have been severely dealt with. Major-General Zatlter, Commissary-General, and Colonel Mosjenski have been deprived of their commissions, their decorations, their titles of nobility, and are to be incorporated with the army as private soldiers. Councilors Wordezowski, Broderki, Wit and Chetchebrog have been sentenced to a similar punishment. Councilors Wojciechowski, Orlovski, Akinin and Tehowoff have been deprived of their appointments and imprisoned in a house of correction.

MR. EDGERTON'S RESIGNATION.

PITTSBURGH, Jan. 20, 1860.

To all whom it may concern:

Having, on the 17th day of January, inst., resigned by office of Receiver for the Pittsburgh, Fort Wayne and Chicago Railroad Company, under an appointment made by the United States Circuit Court for the Northern District of Ohio, on the 7th day of December, ult., and William B. Ogden, Esq., of Chicago, having been appointed by said Court, Receiver in my place and stead, and duly qualified as such, I have this day surrendered to him control over the property and affairs of said Company; and all agents and employees of said Company, and other parties concerned, will account and be held responsible to him accordingly.

JOSEPH K. EDGERTON.

CEDAR FALLS AND MINNESOTA RAILROAD Co.—The C. F. & Minnesota R. R. Co. have entered into an agreement with Boston parties for building its road from Cedar Falls to the Minnesota State line. The road is to be completed and equipped for operation to Waverly, sixteen miles from Cedar Falls, the present year.

A correspondent of the Dubuque Times, says:

Sixty-five miles of the Minneapolis Road are graded, and some of the heavy work is done on the remainder of the Road. Work is temporarily suspended, but the probability is that the road will be completed and in running order in less than three years from this date. Boston men have that road under contemplation, and it is not unlikely that work may be resumed on it before the close of the present year.

While, therefore, we are sure of a railroad connection between Dubuque and the Southern line of Minnesota, in three years from the first of this month, the likelihood is that in less than that time we shall have a Railroad connection with the capital of Minnesota.

TO CONTRACTORS.

LOUISVILLE & FRANKFORT & LEX. & FRANKFORT RAILROADS.

Proposals for the delivery of 50,000 White Oak Cross Ties at Louisville, Ky., within the Spring and Summer of 1860, are solicited till February 10, proximo.

The specifications will require them to be counterbored to exact dimensions of 5x10 and 5x12 inches and 8 feet long. Parties desiring to furnish any portion or the whole, will please address the undersigned at Louisville, Ky., who will furnish any further information.

SAMUEL GILL,

Superintendent.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned

THEODORE DEHON,

a Broadway, New York

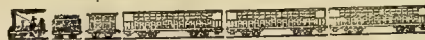
T. F. RANDOLPH & BRO.
Mathematical Instrument Makers

No. 67 West 6th St. bet Walnut & Vine
CINCINNATI O

1860. 1860.

**THE PENNSYLVANIA
CENTRAL RAILROAD.**

260 MILES DOUBLE TRACK.



The Capacity of this Road is now equal to any in the Country.

THREE THROUGH

**PASSENGER TRAINS BETWEEN
PITTSBURG AND PHILADELPHIA,**

Connecting direct in the Union Depot, at Pittsburgh, with Through Trains from all Western Cities for Philadelphia, New York, Boston, Baltimore, and Washington City, thus furnishing facilities for the transportation of Passengers unsurpassed, for speed and comfort, by any other route.

Express and Fast Lines run through to Philadelphia without change of Cars or Conductors.

Smoking Cars are attached to each train; Woodruff's Sleeping Cars to Express and Fast Trains. **The Express runs Daily**, Mail and Fast Line Sundays excepted. Three Daily Trains connect direct for New York. Express and Fast Line connect for Baltimore and Washington.

Six Daily Trains between Philadelphia and New York; Two Daily Trains between New York and Boston. Through Tickets (all rail) are good on either of the above trains, and transfers through to New York free.

BOAT TICKETS to Boston are good via Norwich, Fall River or Stonington Lines. Baggage transferred free.

TICKETS may be obtained at any of the Important Railroad Offices in the West; also, on board any of the regular Line of Steamers on the Mississippi or Ohio Rivers.

Fare always as low and time as quick as by any other Route.

ASK FOR TICKETS BY PITTSBURG.

The completion of the Western connections of the Pennsylvania Railroad, makes this the

**DIRECT LINE BETWEEN THE EAST
AND THE GREAT WEST.**

The connecting of tracks by the Railroad Bridge at Pittsburgh, avoiding all drayage or ferriage of Freight, together with the saving of time, are advantages readily appreciated by Shippers of Freight, and the Traveling Public.

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

D. A. STEWART, Pittsburgh.

H. S. Pierce & Co., Zanesville, O.; J. J. Johnston, Ripley, O.; R. McNeely, Maysville, Ky.; Ormsby & Cropper, Portsmouth, O.; Paddock & Co., Jeffersonville, Ind.; H. W. Brown & Co., Cincinnati, O.; Athera & Hibbert, Cincinnati, O.; R. C. Meldrum, Madison, Ind.; Jos. E. Moore, Louisville, Ky.; P. G. O'Riley & Co., Evansville, Ind.; N. W. Graham & Co., Cairo, Ill.; R. F. Sass, Shaler & Glass, St. Louis, Mo.; John H. Harris, Nashville, Tenn.; Harris & Hunt, Memphis, Tenn.; Clarke & Co., Chicago, Ill.; W. H. H. Koontz, Alton, Ill.; or to Freight Agents of Railroads at different points in the West.

**The Greatest Facilities offered for the Protection
and Speedy Transportation of LIVE STOCK,**

And Good Accommodations, with usual privileges for persons traveling in charge thereof.

FREIGHTS.

By this Route Freight of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Railroad also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company, can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA. PENNSYLVANIA RAILROAD."

E. J. SNEEDER, Philadelphia.

MAGRAW & KOONS, 80 North Street, Baltimore.

LEECH & CO., No. 2 Astor House, or No. 1 S. Wm. Street, N. Y.

LEECH & CO., No. 77 State Street, Boston.

H. H. HOUSTON, Gen'l Freight Ag't, Philadelphia.

L. L. HOUPPT, Gen'l Ticket Ag't, Philadelphia.

THOS. A. SCOTT, Gen'l Supt, Altoona, Pa.

Fb. 2-1yr.

Direct Route to the North-West!

—VIA—

ILLINOIS CENTRAL



RAILROAD

AND PANA OR SANDOVAL

FOR

Decatur, Springfield, Bloomington, Peoria, Burlington, Quincy, La Salle, Rock Island, Dixon, Galena, Prairie du Chien, St. Paul, and St. Anthony, and all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON, AND DAYTON RAILROADS make direct connections, twice daily, at PANA for all the above points. Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. R. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via

PANA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line
FIRST CLASS STEAMERS

Running in Direct connection with this Road for all TOWNS ON THE UPPER MISSISSIPPI

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 135 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,

Gen'l Southern Agent, Cincinnati.

W. P. JOHNSON,

Gen'l Passenger Agent, Chicago.

Winter Arrangement, 1859-'60.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the West, South-West and North-West.

TWO TRAINS

Leave Wheeling daily at 12:35 P. M., and 10:10 P. M.

One Train leaves Parkersburg daily at 9:20 P. M.

Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City. Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2.

Time as quick and Fare as low as by any other ROUTE.

Inquire for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

E. F. FULLER,

General Western Agent

L. M. COLE,

General Ticket Agent.

W. P. SMITH, Master Transportation.

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American* of March 13, 1856, and circular which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the retort is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet,.....	\$300 00
do do do 400 " " " " " " " " " " " "	335 00
do do do 500 " " " " " " " " " " " "	375 00
do do do 600 " " " " " " " " " " " "	450 00
do do do 700 " " " " " " " " " " " "	525 00
do do do 800 " " " " " " " " " " " "	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, as now in operation in several States, apply to

R. T. COVERDALE,

167 Walnut Street, Cincinnati, Ohio, who has the exclusive right to manufacture and sell in the State of Ohio.
Feb. 24th, 1859.

APPLEGATE & CO.,

APPLEGATE & CO., Book-sellers, Stationers and Blank-book Manufacturers, 43 Main Street, Cincinnati, invite the attention of Book-sellers, Country merchants, and others to our extensive stock of School, Classical, Theological, Standard, and miscellaneous Books, Paper, Blank-books, Stationery, etc., etc.; which, from our numerous and favorable arrangements with the principal publishers, as well as our own manufactory, we can offer superior inducements to purchasers. We respectfully solicit a comparison of stock and prices with any other house in the West.

BOOKSELLERS,

Our Stock of Stationery is very complete, embracing in part all the varieties of Cap, Letter, Packet, Commercial, Bath and Note papers, together with Blotting, Tissue, Drawing, Envelope, Manilla and Tea wrap- ping; Bonnet boards, Envelopes, Gold & steel pens, Penholders, Copying Presses, and Books, Ink and surses, Sealing Slates, Mucilage, Book rests, Bill head boxes, Envelope and Card cases, Cash and Post Office boxes, Rulers, Letter scales, Clips, Weights, and Files; Date Calendars, together with all other articles used in the counting-house.

Stationers,

To our Blank Books we especially call attention, as they are manufactured at our own establishment, of the best material, and all neatly paged, including all sizes, from the small memorandum book to the large Royal and Impenbound in a great variety of styles and workmanship. Books made to order of any dimension, with or without printed headings, and warranted to be of perfect quality and durability of binding; all of which will be sold at uniform low prices. Job binding of any kind done in best style. We challenge a comparison with any other house.

BLANK BOOK MANUFACTURERS,

We are prepared to Print and Bind books of any description and in any style sired, at rates as low as the quality of work cut in this where. Our executing these the trade are ample, and authors may depend upon having their books published in the best style and on short notice. Merchants and Bills of Lading, Railroad and Cards, Circulars, or tion of printing, will that we do such obs despatch. Orders re-

Stereotype, of any description that may be desired, can be executed by our branches of facilities for others wishing Bill Heads, Dray receipts, any other description please bear in mind with neatness and respectfully solicited.

Publishers

Our own publications are too well known as works of the highest merit, to require more than an enumeration of the more prominent, which are, *Clarke's Compendium*, *Rollin's Ancient History*, *Plutarch's Lives*, *Josephus*, *Spectator*, *Chain of Sacred Wonders*, *Familiar Science*, *Webb's Monitor*, *Soden's German*, etc., etc. These, together with Books, large and small, Books, new and old, Books amusing and instructive, Books of narrative and adventure, Books suited to every condition, and Books and Stationery in endless variety, make our stock complete and can not fail to please. We invite all to give us a call.

W. HARVEY'S SAFETY JOINT For Coupling the Ends of "T" Rail PATENTED, NOV. 2, 1858.

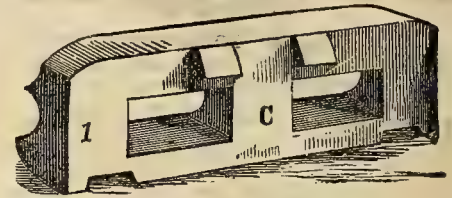


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

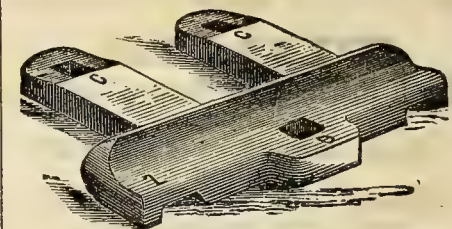
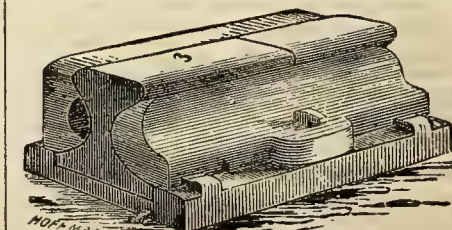


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that one part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly safe road, thereby doing away with the breaking of rails, wheels and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
41 Jefferson street, Albany, N. Y.

APPLEGATE & CO.,
Booksellers, Publishers, Stationers & Blank Book Manufacturers,
43 Main St. Cincinnati O.

43 MAIN STREET, CIN.

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

SOLE IMPORTERS.
PROSSER'S PATENT SURFACE CON-
DENSERS for high pressure steam, with sea or
other bad boiler water, gauges, 3-cutter drills, counter-
sinks, tube end cutting bars, expanders, tube scalers,
steel wire and whalebone brushes, pull lever wrenches,
tubes—plain or enameled, screwed together for Artesian
Wells, HOLLOW SLABS for various purposes, Steel for
Rollers. THOS. PROSSER & SON,
97 Jan. 28 Platt Street, New York.

W. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

BUSH & LOBDELL,
Wilmington - - - - - Delaware

MANUFACTURERS OF
CHILLED WHEELS

AND
TIRES.

For R. R. Cars & Locomotive Engines,
ARE PREPARED TO

Execute Promptly Orders to any Extent
FOR THEIR
CELEBRATED WHEELS,
EITHER SINGLE OR DOUBLE PLATE,
WITH OR WITHOUT AXLES

WHEELS FITTED
To Hammered or Rolled Axles,
In the best manner, at the shortest notice, and on the
Most Reasonable Terms.

ad2

A Book for Every Business Man!
JUST PUBLISHED

—THE—
POST-OFFICE GUIDE!
For Post-Masters and Business Men.

CONTAINING
A Complete List of Post-Offices in the United States
and Territories, arranged by States and Counties; A
Complete List of all Distributing Post-Offices; Rates
of Foreign and Domestic Letter Postage; Rates of
Printed Matter, Transient and Regular; Abstract
of the Laws and Regulations of the Post-Office De-
partment, &c., &c.

COMPILED BY E. PENROSE JONES,
Late Assistant Post-Master at Cincinnati.
Price Twenty-Five Cents.

READ THE FOLLOWING CERTIFICATE.
U. S. BLANK AGENCY, CINCINNATI POST-OFFICE, }
January, 1859. }

This work has been carefully compiled and corrected by
E. PENROSE JONES, Esq., late Assistant Post-Master of the
Cincinnati P. O., from the Records in this Department, and
other sources, and contains the most complete list of Post-
Offices, especially of the Western, North-Western, and
South-Western States, yet published.

MAHLON H. MEDARY,
Agent and Inspector of Blanks, &c., for P. O. Depart.

The book makes an active pamphlet of about 100 pages.
The entire matter is kept standing in type, and as the com-
piler is promptly advised of all New Offices, Changes and
Regulations of the Department, the information is corrected
up to the last day of publication, an advantage possessed
by no other work of the kind.

OBSERVE, That this list is arranged by States and Coun-
ties, making it especially valuable to business men. No
similar arrangement has been published since 1856. There
are 3000 more offices in this than in any book heretofore
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Mar. 10

WHEELER & WILSON'S



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BRANCH OFFICES:

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important improvements, at a reduction on former prices;
and to meet the demand for a good, LOW-PRICED FAMILY
MACHINE, have introduced a new style, working upon the
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Machine, the beauty and strength of stitch, being ALIKE ON
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1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th
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Compound Steam Pumping Engine.



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as the best Pump now in use,
and acknowledged by all who
have used them to be perfect—
are simple in their construc-
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likely to get out of order; well
adapted for Steamboats, Rail-
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Mines, Rolling Mills, Paper
Mills, Factories, Wells, Cla-
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all purposes where a Pump can be used. Also, for
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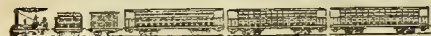
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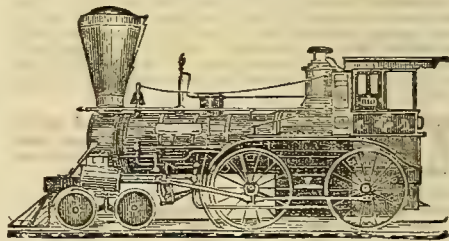
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New York Exp.	11.15 A. M.	9.00 P. M.	9.00 P. M.
Night Exp.	5.00 P. M.	4.00 A. M.	4.00 A. M.
Utica Accom'n.	6.00 P. M.	Ar. U. 10.00 P. M.	
N. Y. Mail	11.15 P. M.	10.00 A. M.	10.00 A. M.
	Leave Buffalo.	Leave Bridge.	Ar. Albany
New York Exp.	5.15 A. M.	5.15 A. M.	3.30 P. M.
Steamboat Exp.	8.00 A. M.	8.00 A. M.	8.00 P. M.
Mail			2.30 P. M.
Cleveland Exp.	6.00 P. M.	6.00 P. M.	4.40 A. M.
Cincinnati Exp.	11.00 P. M.	11.00 P. M.	8.30 A. M.
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P. DUDLEY,
President of the Board

Jan

The Railroad Record.

E. D. MANSFIELD,
T. WRIGHTSON. } Editors.

CINCINNATI:

Thursday Morning, Feb. 16. 1860.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

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If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

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Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

THE European Agents for the *Railroad Record* are Messrs. FREDERIC ALGAR of the London Provincial and Colonial Newspaper Advertisement Office, No. 11 Clements Lane, London, England.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

H. D. PICKETT, Esq., Chief Engineer of the Memphis and Ohio Road, will please accept our thanks for a copy of the report of the Road Commissioner of Tennessee. We shall make some extracts next week.

AMERICAN RAILWAY REVIEW.—The *Review* for February 9, has been received. It is well filled with interesting and useful matters, and is beautifully printed. The office is at 19 Nassau street, New York.

JOHN DOHERTY.—(Civil Engineer) has removed to Sacramento, California.

RAILROAD LAW.—Several cases are now before the Supreme Court, of Ohio, involving all the most important points, concerning the foreclosure of Railroad Mortgages, the sale of Franchises, the distribution of Assets, &c. The most distinguished lawyers of Ohio are employed on both sides.

CINCINNATI, HAMILTON AND DAYTON.—We learn that the earnings of this Company for the half year ending on the first of next month, are such as to justify the Directors in declaring a semi-annual dividend of three and a-half per cent. The official announcement has not yet been made.

PRO RATA FREIGHT RATES.

It was remarked by a careful writer on the United States, that the great curse of this country is over-legislation. The truth of this remark can be found in almost every page of our legislative history. It is, however, in commercial and financial affairs where this evil has been most severely felt. Had not our commerce and finance possessed greater tenacity of life than the fabled hydra, this modern Hercules would have destroyed them long ago. But, it is not in the departments of trade alone that we suffer, for the very existence of the American Union is now threatened through this demon of legislation. If we had our way, now more laws should be passed without the approving vote of two-thirds of the legal voters of the State. There would then be some stability in the order of things, and trade and commerce would have a chance of working themselves clear of the trammels, that legislative enactments have placed upon them. There are no truer aphorisms than "that commerce will take care of itself if not harassed by legal restraints;" and the other, "where commerce prospers, all other branches of industry receive their full share of that prosperity." It is to be regretted, therefore, that our legislators will not learn wisdom by experience and "leave well enough alone,"—a maxim as capable of enriching nations, as well as individuals.

We have been led to these remarks, by noticing the efforts making in New York to obtain legislative interference with the business of the railroads in that State, by the enactment of a law compelling railroad companies to charge the same rate per ton per mile on all property transported, whether carried one mile, or the whole length of the road. Such an enactment would be manifestly unjust—for everybody who knows any thing about railroads, knows that it costs more in proportion to transport property a short distance than it does for a long one. True, the advocates of this measure, propose to meet this difficulty by allowing a fixed price for loading and unloading each car, in addition to the rate per mile. But this by no means can be made to work without inflicting an injury upon the road, or on the distant shippers; for no body asks that the short rate shall be fixed at any but a paying rate. Let us make a few figures and see how the matter will stand.

The experience of the four great east and west lines for five years past, show an actual cost of fifteen mills per ton per mile for transporting property by rail, and that at least double this amount, or three cents, should be charged to make the transportation of through merchandise profitable to the companies. Past experience also shows that it costs nearly, if not quite, twice as much to transport way freight as it does through freight on any considerable line of road.

From these facts it is perfectly manifest, that if the shipper who sends his property but fifty miles pays the actual cost for transportation of it, with a reasonable profit to the company,—and no body would ask them to do business for nothing—the shipper who sends hundred of miles would be taxed with almost a prohibitory rate. For example:

Suppose, and we are willing to give the advocates of the *pro rata* law the lion's share of the argument, that such a law as is now asked for by the canal interests, and the produce speculators of Cleveland, Buffalo, Rochester, etc., and that the railway companies fix their local tariff at the lowest possible figure—say four cents per ton per mile, with a reasonable allowance for loading and unloading. This would give us a rate to and from New York, on the average distance of 800 miles, of \$32 00 per ton, or \$1 60 per 100 lbs. A very fair rate, and one that the railroads would not object to, though one, we fancy, that our farmers and shippers would most earnestly oppose; for it would give the farmers and millers of Rochester and Buffalo a grand advantage over their more distant competitors. And that, we believe, is the whole object of the movement; for, as we understand it, the advocates of the *pro rata* law do not claim that they are *overcharged*, but that the distant shipper is *undercharged*, and is thus enabled to compete on equal terms with them in the eastern markets; or in other words, prevents them from entering the seaboard markets with a dollar or more margin on their flour, than the western miller has. How very patriotic are these advocates of a *pro rata* law!

The injustice of a *pro rata* law may be further shown by its effect on competing lines; for such a law would compel all the freight to pass over the shorter lines, unless the longer ones reduce their short rates to correspond. And this would be unfair to the way shippers on the shorter lines; for it would enable those at the same distance on the longer ones to enter the market on terms, in many cases, that would be equivalent to a fair profit.

From what has been said it will readily be seen that any law regulating the rates of freight, would act disastrously on all parties, and utterly fail of accomplishing any good whatever, except to put money in the pockets of a few speculators in produce. We hope, therefore, that when this measure is brought before the Ohio Legislature, that it will be promptly voted down.

If it be urged that the railroads are ruining themselves by low tariffs on through business, all we have to say is, if that be so, we are sorry for it; but we do not see what the way shippers have to do with that, provided they are not charged more than fair rates for the service performed for them. They have no more right to grumble at the railroads for encouraging western industry by low rates than the wine dressers in the parable had to grum-

ble because those who labored but one hour received equal to those who had "borne the burthen and heat of the day." If the railroads are desirous of ruining themselves, it is none of our business; but it is very certain that they can not continue to ruin themselves for any very great length of time, and that the evils complained of will speedily work their own cure, and to much better advantage if not hampered by legislative restrictions.

CANALS VS. RIALROADS.

The State of New York is engaged in a vast experiment, (a costly one,) to make a canal rival a railroad. It seems to us, this is not profitable.

In 1825, New York made her Erie Canal, and for more than twenty years, that canal poured into her lap the products and wealth of the West. The great growth of New York city is in a large measure due to the Erie Canal. It is quite natural, therefore, that the people there should be strongly impressed with the idea that a canal can do everything. Hence, when the trade of the canals began to decline, a project was put on foot to "enlarge" the Erie Canal; to make it a sort of tide water stream; with *seven feet depth*. This would be, in fact, creating a large river through New York, on which they propose to employ Steam Tow Boats. All this, (even if successful,) can not be done without immense expense. Accordingly several years since, the work of enlargement was begun, and *twelve millions* (\$12,000,000) borrowed for that purpose. At the present time, some *fifteen millions* have been expended, and the work not half done, and no profitable results seen. In this state of the case, it requires pretty strong arguments to go on. But, the ingenious theorists of water against steam are not to be put down. Their next step is to *pro rata* the railroads; that is, if the canal can't get along without high prices, the railroads shan't either. What is the practical result? Plainly, that all the prices of transportation in New York will be raised; and then the New York lines left with this burden to contend against the Pennsylvania and Baltimore lines. A more suicidal policy was never undertaken. It does not affect the Western people, that we know of; for they can send their products to Philadelphia and Baltimore. But, in aspect, it is injurious to New York. It is the interest of New York to have as much of the products of the Mississippi Valley sent to her great metropolis, as possible; for, on every pound of such products she makes a *pr fit*. Now, is it at all likely that the quantity of such products will be increased, by compelling the railroads to come to the level of a Canal?

But, the friends of Canals can not see that. They are active and determined on continuing

the experiment of sinking money. Here are some paragraphs by a writer in the *New York Times*, which will exhibit one of the fallacies relied on. The writer says:

"Notwithstanding all this, the revenues continued increasing up to the year 1851, when they reached the sum of \$3,700,000, with a tonnage of 3,582,000 tons. The rate of charges for tolls was then reduced, which brought down the next year's revenue to \$3,174,000,—but with the tonnage increased to 3,863,000 tons, which at former rates of tolls would have given a revenue of \$4,000,000. In 1858 the tolls were again largely and injudiciously reduced—having *one-third* taken off the rate on agricultural products, and *one-half* from the rate on merchandise.

"The revenue of this year consequently ran down to \$2,047,000, while the tonnage stood at 3,665,000 tons, being more than eighty thousand tons greater than in 1851, but a decrease of more than \$1,600,000 in the revenue as compared with that year. This is a great falling off of income, but does not look very much like a decay of business. With the same rate of toll as charged the previous year the revenue would have been \$2,750,000, and with the same rate as in 1851, it would have been nearly four millions.

"The greatest amount of tolls was collected in 1851, since then there has been a falling off—but *not in the business or tonnage of the canals*, this has never fallen below that of 1851—excepting in the year 1857, and then it was in consequence of the shortness of the season and the numerous breaks which occurred from time to time during the summer. This was the year of the ice freshet at Albany; the canal opened late and a portion of new work came into use for the first time, and the banks gave way several times during the season.

"The commercial revulsion also checked business during the latter months of navigation. All these causes combined to reduce the tonnage of the year a little below that of 1851, but which it fully recovered the next year."

Now, here is one of the most plain and palpable fallacies we have ever seen. The writer ignores the main fact, in the whole case; that *the tolls were reduced for the sole purpose of keeping up the tonnage*. What would that tonnage have been, if the tolls were not reduced? In all probability, the Erie Canal would not have carried *one-half* the products it did. Under the old tolls, the Canals would soon have been desolate. As it is, the Canals have barely maintained their business. Thus:

	Tonnage.	Tolls.
1851.....	3,582,000	\$3,700,000
1852.....	3,863,000	\$3,174,000
1858.....	3,665,000	\$2,047,000

Now, here is the fact, that, after reducing the tolls *one-third* in 1852, the tonnage in 1858 was 200,000 tons less than in 1852. Now, suppose the tonnage of 1858 had to pay *one million of dollars* additional, would it ever have come on the Canals? Not one half of it. The tolls, therefore, must be kept low, in order to get the trade. No other course is possible. But, the reader will observe, that, notwithstanding the Western trade has increased so largely, the tonnage of the Erie

Canal, under its reduced tolls, stand still. *Relatively*, therefore, to the railroads, it diminishes.

But, the advocate of Canals has another resource. He is to have seven feet water and use steam tow boats. This, he thinks, settles the matter:

"But with seven feet water in the canal there will come steam towing, and there is very little doubt that an average speed of five miles an hour will be maintained, or two and a half days from Buffalo to Albany. The boats now propelled by steam are allowed to run six miles an hour; but a boat having one or two others in tow will not maintain that rate of speed. It is at once apparent that no railroad can compete with this time, to say nothing of the many incidental advantages which the boat has over the car, the saving in cartage, the damage from frequent handling, the greater ease and satisfaction with which the business can be done—all these will combine to give the canal the preference and superiority over the railroad. Let the enlargement be completed, and the canals will take care of themselves and the State too. They will soon pay for themselves, and pay the expenses of the State Government, and carry the produce of the State at a merely nominal rate of toll. It is not necessary to argue with those who contend that the State should create no debt for any internal improvements, but that such enterprises should pay their own way, and build themselves from their own surplus earnings. If such had been the reasoning of the men of former times, we should never have had the Erie Canal."

How is five miles an hour to compete with railroads at twelve miles an hour? It is notorious that the average of freight cars is twelve miles an hour. But, the New York writer has got into another great and important fallacy. He *assumes* that the first appearance of the freight is *by water* at Buffalo. Now this is not the fact, nor likely to be the fact. The produce comes from the interior of Ohio, Indiana, Illinois, and Michigan. Now, it is carried largely, by railroad, from the interior to Cleveland, Toledo, and Chicago, and Detroit.

Is it not much easier to continue that produce on, *by rail*, to New York, than to give it two transshipments; and one of those from land to water?

The idea, that canals can, on equal terms, compete with railroads, is altogether fallacious. If to enable them to do this, special advantages are given them, it must be at the expense of commerce.

WELDING STEEL.—English cast steel, as is well known, is difficult to weld, on account of its great fusibility. In Wirtemberg it is placed in the midst of a powder composed of eight parts of sulphate of barytes, two parts of unvitrified salt, and two parts of peroxyde of manganese, which facilitates the welding of the steel, and replaces the sand ordinarily employed. This mixture is cheap, and allows the steel to be heated to a very elevated temperature without injury.

REPORT OF THE DELAWARE AND RARITAN CANAL, AND CAMDEN AND AMBOY R. R. COMPANIES.
—The report of the Directors of the Delaware and Raritan Canal, and Camden and Amboy Railroad and Transportation Companies, has been presented to the Legislature of New Jersey. We are indebted to Mr. PARRY for the following synopsis:

The report states that the several lines of the Road and Canal have been kept in good working order during the year, and they have met with that success and prosperity which attend good management. The management of the Road is reported to have been of the most satisfactory character. The number of passengers carried on the railroads of this company during the last year, together with amount of passage money paid, and the transit duty recurring to the State are as follows:

In the Camden and Amboy lines from Philadelphia to New York, via. Amboy, 27,050 1-2 first-class passengers; passage money, \$72,069 93; transit duty, \$2,755 05. Excursion passengers from Philadelphia and New York and return, 738; passage money, 1,442; transit duties, \$147 67. Second-class passengers, 7,397; passage money, \$11,493 98; transit duties, \$739 70. By the same line the first-class passengers from New York to Philadelphia are 21,580; passage money, \$80,417 58; transit duty, \$2,158. Second-class passengers, 17,122 1-2; passage money, \$26,527 18; transit duty, \$1,712 25. Excursion passengers, 395 1-2; passage money, \$1,374; transit duty, \$79 10.—Way excursions passengers, 331; passage money, \$2,544 19. Way passengers, 2,275 1-2; passage money, \$7,754 72; transit duty, \$227 55. Passengers between Philadelphia and Amboy, 694; passage money, \$1,459 68; transit duty, \$69 40. Passengers between New York and Bordentown, 1,769; between New York, Burlington and Florence, 2,754; between New York, Beverly, Rancocas, &c., 626. For passengers between Yardleyville and intermediate places and New York, including all points on Freehold and Jamesburg Railroad, \$24,953 42 passage money was received. For passengers between South River and intermediate places and Philadelphia, including Mt. Holly and all points on the Freehold Railroad, the passage money received was \$54,936 95.

Amount received for railroad and steamboat freight between Trenton and intermediate places and Philadelphia, \$3,707 30. Passage money from passengers between New York and Perth and South Amboy, \$4,874 45. For steamboat freight between New York and Amboy, \$642.

Passengers by the lines via Camden and Branch Railroad from Philadelphia to New York, 78,615; passage money, \$232,730 89.—Amount received from the Philadelphia and Trenton Railroad Company for the use of cars, &c., \$120,000. Amount received from the Branch Railroad including settlement with New Jersey Railroad, \$205,585 76. Number

of Northern and Western passengers, 120,333. Number of passengers carried on lateral railroads on main routes, 5,467 1 2. Owing to the loss of the Post-office appropriation bill in the last Congress, the amount received during the year for transporting the United States mails was only \$4,981 25. The amount received for steam towing on the Delaware and Raritan rivers is \$87,788 01.—Amount received for rents, &c., \$28,508 63.—For the transportation of goods, \$629,226 50.

The gross receipts of the Railroad and branches during the year, amount to \$1,802,589 53; expenditures, \$891,337 50.

The business of the Canal is reported as follows: Transported through the Canal, 1,155,261 tons of coal; 1,606,558 cubic feet of lumber; 637,736 1-2 bushels of grain and feed; 164,219 barrels of flour; 31,825 tons of iron; 209,581 tons through merchandise not included above. The gross receipts of the Canal amounted to \$492,198, and the expenditures, \$157,068 66.—The whole revenue accruing to the State for the year 1859 is \$140,286 70.

MEETING OF THE NEW BOARD OF DIRECTORS OF THE COVINGTON AND LEXINGTON R. R.

The new Directory held a meeting at Cynthiana on Wednesday last, at which the Vice-President of the new organization, A. L. Greer, Esq., presided, and Wm. S. Wall acted as Secretary.

The proceedings of the 'stockholders' meeting, held some weeks since in Covington, were read, and approved, and ordered to be recorded.

Brutus J. Clay, one of the Directors resident in Bourbon county, having resigned, Hon. Wm. B. Kinkaid, was elected to fill the vacancy.

The following resolutions were unanimously adopted:

WHEREAS, The purchaser at the recent sale of the Covington and Lexington Railroad, R. B. Bowler, Esq., has proposed to surrender the road to the stockholders on being indemnified for his expenditures in the stock and securities of the road, with interest thereon; and whereas, the opinion of this Board concurring with the report of the Investigating Committee in all respects in regard to said sale, the circumstances attending the same, and that an earnest and energetic effort should be made to recover the road, it will result in success. It is therefore—

Resolved, That a Committee of three, consisting of the President, A. L. Greer, Vice-President, and Peter Zinn, be appointed to confer with R. B. Bowler, and ascertain the most favorable terms upon which the road can be recovered, and his terms, and if, in the opinion of said Committee, his terms are fair and practicable, and the stockholders, by themselves and friends, will be able to accept the same, they shall call the Board together for further action, or they may take such measures in the mean time that they may think the circumstances may require to close the arrangement;

Resolved, That in the event of such negotiations proving fruitless, that the said Committee be, and they are hereby instructed to employ such capable and responsible attorneys as they may select, to prosecute the appeal from Judge Goodell's decision, together with any other suit that they may agree upon, and also fix the compensation for such services; provided, that if any settlement or compromise is made pending the said litigation, that is approved of by this Board, or said suit is set aside by proceedings in said appeal, then said attorneys shall receive a just proportion of said compensation, to be determined by all the circumstances in the case.

Resolved, That inasmuch as the holders of deferred third mortgages, and deferred incomes, and the general creditors of said road (in case said sale shall not be annulled by negotiation or otherwise), will lose their entire investment in common with the stockholders, that they be requested to change their securities into stock at par, or give a reasonable extension to the road upon their claims, and also join in the effort to recover the road, on such terms as they may agree upon with said committee and the attorneys they may employ.

Resolved, That G. H. Perrin, and Lucius Desha be appointed a committee to collect the subscriptions of stockholders in Harrison and other counties; and apply the same toward paying expenses of the appeal, and paying attorneys in the appeal case; and any payment so made shall be credited to the parties paying the same respectively, and they are also directed to have a record copied and printed and filed in the Appellate Court.

Resolved, That a committee, composed of G. H. Perrin and — Clarkson, be appointed for the purpose of examining the charges of freight, and to report to an adjourned meeting of the Board if it would be expedient to make any change in the same.

SYNOPSIS OF THE REPORT OF THE TRUSTEE OF THE OHIO LIFE INSURANCE AND TRUST COMPANY.

CINCINNATI, Feb. 6, 1860.

To Hon. George H. Hilton, Judge of the Probate Court of Hamilton County, Ohio:

In obedience to an order of the Honorable Court, issued December 1, 1859, I, as sole Trustee, of the Ohio Life Insurance and Trust Company, set forth in the accompanying papers as follows, to wit:

First. An inventory in detail of all the property and assets of the Ohio Life Insurance and Trust Company, which came to the possession or knowledge of Jas. P. Kilbreth and Chas. Reemelin, joint Trustees appointed January 25, 1859, to November 25, 1859, at which time said Chas. Reemelin, on his petition therefor, was released from said trust by Court.

Under this head, in sheets marked letter A. Nos. 1 and 2, appear the accounts against all parties gathered out of the New York Books..... \$2,970,956 17
In sheets marked letter A. Nos. 3 and 4, showing accounts and notes against sundry parties on the Cincinnati Books..... 596,727 62
In sheet marked letter A. No. 5, giving a list of stocks and bonds, &c., amounting nominally to..... 1,090,120 00
In sheet marked letter A. No. 6, being a list of lands and other real estate, the taxable value being..... 55,620 00
In sheet marked letter A. No. 7, exhibiting a list of claims in judgement, most of them of long standing and small value..... 69,133 65

Assets, the great portion uncertain and nominal..... \$4,789,557 44

Second. A schedule of the names of creditors whose claims have been allowed by said

Kilbreth and Reemelin, Trustees, with the respective amounts, up to November 25, 1859, as follows, to wit:

Depositors in the Banking Department, as per sheet letter B. No. 1, fully adjusted.....	\$208,222 56
Not denied, but not fully adjusted.....	51,048 10
Checks of Cincinnati office in New York, same sheet.....	38,273 50
Checks of New York office on Amer. Ex. Bank, same sheet, adjusted.....	4,955 85
Not adjusted, but not denied.....	78,157 88
Certificates of Deposit in Banking Department, letter B, No. 2, adjusted.....	20,231 21
Not adjusted, but not denied.....	4,515 23
Certificates issued by former assignees, same sheet.....	133,622 37
Banks, bankers, railroads and other accounts, principally from the New York office, same sheet, adjusted.....	399,281 91
Not yet reduced to adjustment, but will most probably have to be admitted.....	835,216 55
Other claims adjusted not included in the last named list—see same sheet for details.....	13,346 82
Twenty-years' certificates—same sheet,* \$38,000 of them not yet presented.....	62,598 64
Certificates Trust Department, same sheet,* \$51,652 26 of them not presented.....	226,239 58

* The two items last stated, instead of sheet letter B, No. 2, are on letter B, No. 3.

Liabilities, the larger part adjusted..... \$2,075,710 20

Third. All property and effects of said Trust Company that came into the possession of said Stetson and others as Assignees.

In pursuance of this branch of the order of Court, I submit as follows, viz:

1. *Sheet Letter C*, which contains an abstract and synopsis of the state of the institution September 26, 1857, the day on which the assignment was originally made—taken from the Statement Book made up on that day.

2. *Sheet Letter D*, which contains a full abstract of the business transacted by C. Stetson and others, Assignees, taken from their books, from September 26, 1857, to October 18, 1858, the day R. Mathers, Sheriff and Special Receiver took possession.

3. *Sheet Supplement to Letter D*, which contains a synopsis of the state of the business October 18, 1858, the day on which C. Stetson and others gave place to R. Mathers, Sheriff and Special Receiver.

It is proper here to remark that only that part of the New York business which includes the results of their transactions as Assignees there was transferred by Stetson and others to Cincinnati, and is contained in the above described sheets. I propose, on my next visit to New York, to procure, from the books there, an abstract of those transactions, and file the same under this branch of the order of the Court. The books being still under the jurisdiction of the Sheriff of New York, can not be removed as yet.

Fourth. The receipts and disbursements of cash in detail, showing the sources from which it came, and the persons to whom and for what purpose it was paid; J. R. Kilbreth and C. Reemelin, Trustees, from January 25 to November 25, 1859.

Sheet letter E shows receipts coming under the following general heads, viz:

From R. Mathers, Sheriff.....	\$38,339 97
Interest on deposits and rents.....	4,547 99
Bonds sold.....	15,133 19
Payment on real estate in Iowa.....	1,682 19
Rescued from attachment in New York, Boston and Baltimore.....	4,544 97

Rescued from attachment in Buffalo	28,689 40
Collections from other sources, notes, accounts, &c.....	70,610 02
	\$163,547 73

The same sheet also shows expenditures coming under the following heads:

Dividend No. 1, being the part paid up to November 25, 1859.....	86,128 72
Expenses—mostly law expenses—settled for the former Assignees.....	4,380 69
Law expenses of Kilbreth and Reemelin, leaving some unpaid.....	1,938 12
Traveling expenses of Trustees, S. P. Bishop and attorneys during the year.....	1,376 13
Clerk hire, rent, &c., leaving some unpaid.....	2,001 35
C. Reemelin's charge for services.....	5,000 00
J. P. Kilbreth, on account.....	4,445 79
Paid to save assets in Buffalo, Nashville, Boston and New York.....	22,654 17
	\$127,924 97
Balance cash on hand November 25, 1859.....	\$35,622 76

Fifth. Claims against the debtors of the Ohio Life Insurance and Trust Company settled in whole or in part, or compromised, by Kilbreth and Reemelin, Trustees, up to November 25, 1859, the time at which C. Reemelin was released from the trust.

Under this clause of the order of Court, sheet letter F sets fourth the settlement made, with the full and minute details thereof. It shows the aggregate of such settlement to be \$361,525 63. Owing to the extraordinary connection, or, rather, complication, of the accounts of debtors and creditors on the books of the company, by farther the larger portion of the aforesaid sum, instead of coming into the hands of the Trustees as cash or other disburseable assets, was applied on attachments, or went to meet counter claims in some other form.

I have, in conclusion, to say that in the preparation of my report, my aim has been to fulfill the order of the Court, having respect as well to the spirit as the letter. I have sought to present, as far as the difficult, complicated and wreck-like state of the institution would permit, a simple, practical and detailed exhibition of its affairs. The several sections of the report alluded to in this summary will speak for themselves. I have gone largely into details. If any of the great number of persons interested in the result should desire it, I will take pleasure at all times in furnishing still further and more particular explanations.

One dividend of ten per cent., it is known, has been made on all adjusted claims, for which no attachment or other special security was held. I trust the ensuing spring and summer will not pass before a second dividend will be announced.

The assets in the accompanying sheets, it will be observed, reach a high sum in figures. These figures, it will readily be seen, are nominal to a very large extent—excepting that small part of the assets which the public will recognize as good, in the list of bonds, the list of real estate, and, to a fair extent, the Cincinnati list of claims. Yet even this latter list had been so diligently sifted that the claims fall vastly below an average—many of them will doubtless be collected in whole or in part.

The immense debts appearing against different parties, transferred from the New York books, are almost entirely disputed, and some of the names are purely fictitious. So, doubtless, are many of the accounts. My former worthy colleague and I thought it, however, advisable to place upon our books every claim, or color or shadow of a claim, of which, by any process of inquiry, we were able to find the slightest trace. This, of course, brought upon the books a vast number of claims, out of which we could have but little hope of realizing value. Yet we thought it might prove useful to have them before us, and in many cases they have proved so.

It will be seen I have not brought into my report any business beyond November 25, 1859. This, of course, will belong to my next report. Respectfully submitted,

JAS. P. KILBRETH, *Trustee.*
CINCINNATI, February 4, 1860.

COVINGTON AND OHIO RAILROAD.

We believe the public mind is thoroughly aroused in favor of State defense and State development, and whatever may be done towards the advancement of these objects, without increasing the burdens of taxation, what will be approved by the whole people. Among the subjects now in demanding the attention of the Legislature there is not one which calls for more than that of improvements. It is proper for our Legislature to deal with this subject as statesmen, and that whatever is done should be done wisely and effectually. We should have a policy, and that policy should be carried out. Whatever may have been heretofore the opinion as to particular schemes—whether they should have been commenced or not, or as to the manner in which they may have been prosecuted—we should now look at the actual condition of things.

The State has been actually employed for more than twenty-five years, in the effort to connect the waters of the Chesapeake with the Ohio river by canal or railway. This has been the favorite policy for more than a quarter of a century, and its consummation has always been regarded as indispensable to the full development and prosperity of the State.

At an expense of more than \$10,000,000 a canal has been completed a distance of two hundred miles to Buchanan, with an expenditure west of that point of more than \$600,000.

There has been expended on the Central Blue Ridge and Covington and Ohio Railroad about ten millions of dollars, and we now have about 200 miles of this line of railway in operation. The total expenditure of State and private funds in this central line and railway and canal, is not less than \$20,000,000, of which the State has paid more than fourteen million of dollars. The only dividend on this entire investment, which the State secured last year, was about \$84,000, paid on the stock in the Central Railroad. There is no ground to expect that this dividend will be increased until the connection is made with the steamboat navigation of the Kanawha.

It would seem to be the best policy for the Legislature to confine its efforts, for the present, to completing the Canal from Buchanan to Clifton Forge, the point of intersection of the Central Road with Jackson's river, and to grading and laying the track of the Covington and Ohio Railroad thence to the Kanawha river.

And it would seem wise to make provision for an annual appropriation until these objects were attained, such annual appropriations being either confined to such surplus revenue as may be anticipated with certainty from the present rate of taxation, or being at once provided for by such increases of taxes as may be necessary for their gradual attainment, without an onerous increase of the public burdens. When this is done the cars of the Central Road could run through to the Kanawha and then connect with 10,000 miles of Western steamboat navigation. We understand that is an admitted proposition among those who are conversant with the great artificial channel of the trade between the Atlantic cities and the West, that our Virginia central line of railway and canal combined, will be cheaper and more cer-

tain in the tonnage between the East and West, then any existing or contemplated improvement with the exception of the Erie Canal; and that for five months of the year, the Erie Canal being closed by ice, our Virginia line would be, for that time, without any competitor, in fact for the great Western trade. There are now six or seven great lines of railway connecting the Northern cities with the West, and each one of these lines is burdened with trade and travel to its full capacity.

It may, therefore, be taken for granted that our Virginia Central Line will be supplied with all the tonnage and travel which it can accommodate, and, being enabled to do the business cheaper than any competing line, can select the most valuable trade and charge remunerating rates.

If the estimates of those who are well acquainted with the Western trade be correct, and the capacity of the Covington Road even with a single track, be not greatly over-estimated, the net revenues obtained from the canal and road, in the situation in which they would be placed by this extension, would be more than sufficient to pay six per cent interest on the total expenditure for the construction of both, and leave a surplus to complete the road to the Big Sandy: or it might enable the Canal company from its increased revenues, to press its continuous water line without an application to the General Assembly. Such are the conclusions to which the data, furnished by competent engineers, would lead. Admitting, that the amount requisite to make this connection did not itself yield a net revenue, we consider it certain that the trade and travel which the Covington Road would bring to the canal and Central Road would be sufficient to ensure a net revenue on these works of at least six per cent on their cost, and would render productive fourteen millions of dollars, on which the State now receives only eighty-four thousand.

Not only do we urge the completion of the Covington Road as a sound financial measure, but as indispensable to the full accomplishment of the policy of direct trade with foreign countries, a scheme which should now most closely occupy the attention of every Virginian statesman. We believe the road will have the capacity to pour one million tons of Western produce annually upon our tide-water cities. All who are familiar with statistics of the productions of valleys of the Ohio, Mississippi, Missouri, and of the tributary rivers, will admit that they can furnish annually not less than 100,000 tons of their choicest products, consisting of wheat, corn, tobacco, beef, pork, &c., &c., worth more than \$50,000,000, which will be sufficient to sustain a foreign trade as large as any Virginia would desire. Richmond is now one of the best markets in the United States for wheat and tobacco, two of the choicest and most valuable of Western staples. Let us but open this avenue, and Richmond will become the greatest market for Western productions. A large foreign trade will grow up, manufactories will flourish, and the commercial independence of Virginia will be established on a sure foundation.

In these sentiments we have ignored the wealth of Western Virginia, which, long dormant, will be developed. Her wealth in forests, and mines is incalculable, but has not been available either to her people or her State, for want of suitable access to market.

We shall level the Alleghany Mountains by this policy, and Western Virginia can have her capital, without being required to travel through another State. Our whole State will become united in interests, one and indivisible, and

will constitute an entire of herself; and we shall be able to maintain her rights and independence in or out of the Union, as our sovereign people of their own free will may decide.

Such are the views which induce us to commend the policy of providing for the certain completion of this great State Work. But the people of Virginia will, as the Legislature should consider this as only a general work, and as part of a system to sustain the independence and power of the Commonwealth; and we hope that nothing will be voted for this or any improvements, until the expressed will of the people in regard to State defenses, and other modes of securing commercial and political independence, shall have received a full and careful consideration. The internal improvements as a part of a system to strengthen the physical force and political power of the State, are entitled to receive a cordial support; if they are pressed to the exclusion of measures on which the security and independence of the Commonwealth depends, they will meet the fate in which all measures of a separation will be involved.—*Richmond Examiner.*

NASHVILLE AND NORTH-WESTERN RAILROAD.

Our readers will recollect, that we have noticed, in times past, this important work, which is to connect Nashville, Tenn., with Hickman, Ky., on the Ohio. It will be a very important work for Tennessee, and we are glad to know it is rapidly progressing. We have been informed by E. Culverhouse, General Agent of the Company, that the track laying had commenced at Hickman, Ky., and the iron purchased for the whole road. We are also informed that the grading, trestle work, bridging, culverts, etc., are completed ready for the iron superstructure for the first thirty-six miles of the road from the Mississippi river. The Company has also just closed contracts for twenty-eight miles additional of the road from Dresden to Huntingdon, making sixty-four miles on the western end of the road from the Mississippi river, and on the eastern end of the road forty-eight miles is under contract, and will be ready, the first twenty miles, for track laying in March, leaving a gap of about fifty-nine miles between Nashville and the Mississippi river at Hickman, Ky., which the Company intends to put under contract early in spring.

THE PACIFIC RAILROAD.—The following is an extract of a letter from a gentleman at Austin to the New Orleans Crescent:

A bill has passed the Legislature repealing the 7th section of the general railroad law, which provided for the State's purchasing railroads by paying for the cost of construction, with 12 per cent interest on the amount per annum. The State will issue patents to the Southern Pacific Railroad Company for their lands already acquired by the construction of twenty-five miles. The acceptance by Mr. Thomson of the Presidency has had a good effect here. His name is a guaranty that the labors of the late President and his coadjutors have been eminently successful in freeing the company from litigation, debt, and in raising a large cash fund for the purchase of labor.

Gen. Houston will adopt a different policy toward railroads, in his administration, from

that of his predecessor. It will be characterized by liberality, and all the encouragement within the scope of his powers, for their rapid development and growth. None of that spirit of hostility which predominated so markedly in Gov. Russell's administration will be tolerated by the old hero.

A letter received from Gen. Richardson, dated Austin, Texas, of January 24th, to the Messrs. Burkhart, of this city, confirms the above, and moreover states that the Legislature will grant such additional amendments to the charter as are desired. This news may be relied upon by the stockholders, and we see nothing now to discourage us. The prospects are bright in Texas, and if Congress shall pass a law lending aid to this road, the stock must go to high figures, and that within a much shorter period of time than most of us suppose.—*Louisville Journal.*

THE TUNNEL ROAD.—What has become of the Tunnel? Recently, we heard, that the Tunnel Company were about to bridge the Tunnel, by going round it. This we were told could be done, by 100 feet grades. The project has, we hear, been abandoned, and our tunnel proprietors are determined to go ahead on their own hook. This is right. If there be a meritorious project, this is one, and the other companies will make it out in a short time.

COVINGTON AND OHIO RAILROAD.—The bill appropriating \$1,500,000 to the Covington and Ohio Railroad, has passed the Legislature of Virginia. No more than \$100,000 is to be expended in any one year. This road has its Ohio river terminus at Mount Pleasant, at the mouth of the Great Kanawha. It is a continuation of the Virginia Central which connects at Gordonville with the Orange and Alexandria road for Washington City, and at Richmond with the Virginia Roads for Norfolk and the South.

NASMYTH'S STEAM HAMMER.—There is one use to which the steam hammer is now becoming extensively employed by some of our manufacturers that deserves special mention, rather for the prospect which it opens to us than for what has already been actually accomplished. We allude to the manufacture of large articles in dies. At one manufactory in the country, railway wheels, for example, are being manufactured with enormous economy by this means. The various parts of the wheels are produced in quantity either by rolling or by dies under the hammer; these parts are then brought together in their relative positions in a mould, heated to a welding heat, and then by a blow of the steam hammer, furnished with dies, are stamped into a complete and well finished wheel. It is evident, that wherever wrought iron articles of a manageable size have to be produced in considerable quantities, the same process may be adopted, and the saving effected by the substitution of this for the ordinary forging process will doubtless ere long prove incalculable.—*London Enquirer.*

☞ The Earnings of the Central Railroad Company of New Jersey, were:

For the Month of January, 1860.....	\$75,332 02
For the same Month last year.....	61,145 27
Increase.....	\$14,186 75

MONETARY AND COMMERCIAL.

There is a continued improvement in the tone of the Money Market since our last issue, and but little difficulty is experienced in disposing of good paper at regular rates. The supply of currency from collections has considerably increased. Rates at discount houses to customers are the same as heretofore quoted, viz., 10@12, and outside and street transactions are done at 12@12½; 15 being the ruling price charged.

Our merchants are looking forward to a good and safe, though they do not anticipate a heavy, spring trade.

Eastern Exchange is firm at ½@40 prem. buying and ½ to ¾ prem. selling. New Orleans is dull. Quotations are:

	BUYING.	SELLING.
New York Sight.....	37@40 prem.	1@1/2 prem.
Boston.....	@ 1/2 prem.	1@1/2 prem.
Philadelphia.....	37@40 prem.	1@1/2 prem.
Baltimore.....	@ 1/2 prem.	1@1/2 prem.
New Orleans.....	par@ 1/2 prem.	1@1/2 prem.
American Gold.....	25@30	1@1/2 prem.

The New York Stock Market on Monday was very irregular with moderate transactions only. The quotations were: U. S. 5s, 1874, 100½@100½; Virginia 6s, 92@92½; Missouri 6s, 80½@80½; Canton Company, 16½@17; Cumberland Coal, 15½@16; Pacific Mail, 81½@82; New York Central Railroad, 70½@71; Erie Railroad, 8½@9; Hudson River Railroad, 40½@40½; Harlem Railroad, 9@9½; Harlem Preferred, 33@34; Reading Railroad, 39½@40; Michigan Central Railroad, 37½@37½; Michigan Southern and Northern Indiana, Guaranteed, 14½@14½; Panama Railroad 132@132½; Illinois Central Railroad, 56½@56½; Galena and Chicago Railroad, 57½@57½; Cleveland and Toledo Railroad, 19½@19½; Chicago and Rock Island Railroad, 62½@62½; Illinois Central 7s, 88½@89.

Sonora Exploring and Mining Co.

THE ANNUAL MEETING OF THE STOCKHOLDERS of this Company will be held in the City of Cincinnati at the Office, 167 Walnut Street, on the third Monday of March next, pursuant to the By-Law of said Company, for the purpose of receiving Reports and Electing Officers for the ensuing year.

JOHN KENNETT,
Chairman of Meeting of Stockholders.
Cincinnati, Feb. 16, 1860.

Santa Rita Silver Mining Co.

THE ANNUAL MEETING OF THE STOCKHOLDERS of this Company will be held in the City of Cincinnati at the Office, 167 Walnut Street, on the third Monday of March next, pursuant to the By-Law of said Company, for the purpose of receiving Reports and Electing Officers for the ensuing year.

T. WRIGHTSON, Secretary.
Cincinnati, Feb. 16, 1860.

TO CONTRACTORS.

LOUISVILLE & FRANKFORT & LEX. & FRANKFORT RAILROADS.

Proposals for the delivery of 50,000 White Oak Cross Ties at Louisville, Ky., within the Spring and Summer of 1860, are solicited till February 10, proximo.

The specifications will require them to be counterbored to exact dimensions of 5×10 and 5×12 inches and 8 feet long. Parties desiring to furnish any portion or the whole, will please address the undersigned at Louisville, Ky., who will furnish any further information.

SAMUEL GILL,
Superintendent.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned
THEODORE DEHON,
no13 10 Wal Broadway, New York

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
No. 67 West 6th St. bet. Walnut & Vine
CINCINNATI O

1860. 1860.

THE PENNSYLVANIA
CENTRAL RAILROAD.
260 MILES DOUBLE TRACK.

The Capacity of this Road is now equal to any in the Country.

THREE THROUGH
PASSENGER TRAINS BETWEEN

PITTSBURG AND PHILADELPHIA,

Connecting direct in the Union Depot, at Pittsburgh, with Through Trains from all Western Cities for Philadelphia, New York, Boston, Baltimore, and Washington City, thus furnishing facilities for the transportation of Passengers unsurpassed for speed and comfort, by any other route.

Express and Fast Lines run through to Philadelphia without change of Cars or Conductors.

Smoking Cars are attached to each train; Woodruff's Sleeping Cars to Express and Fast Trains. **The Express runs Daily**, Mail and Fast Line Sundays excepted. Three Daily Trains connect direct for New York. Express and Fast Line connect for Baltimore and Washington.

Six Daily Trains between Philadelphia and New York; Two Daily Trains between New York and Boston. Through Tickets (all rail) are good on either of the above trains, and transfers through to New York free.

BOAT TICKETS to Boston are good via. Norwich, Fall River or Stonington Lines. Baggage transferred free.

TICKETS may be obtained at any of the Important Railroad Offices in the West; also, on board any of the regular Line of Steamers on the Mississippi or Ohio Rivers.

Fare always as low and time as quick as by any other Route.

ASK FOR TICKETS BY PITTSBURG.

The completion of the Western connections of the Pennsylvania Railroad, makes this the

DIRECT LINE BETWEEN THE EAST
AND THE GREAT WEST.

The connecting of tracks by the Railroad Bridge at Pittsburgh, avoiding all drayage or ferrage of Freight, together with the saving of time, are advantages readily appreciated by Shippers of Freight, and the Traveling Public.

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

D. A. STEWART, Pittsburgh;
H. S. Pierce & Co., Zanesville, O.; J. J. Johnston, Ripley, O.; R. McNeely, Maysville, Ky.; Ormsby & Cropper, Portsmouth, O.; Paddock & Co., Jeffersonville, Ind.; H. W. Brown & Co., Cincinnati, O.; Athern & Hilbert, Cincinnati, O.; R. C. Meldrum, Madison, Ind.; Jos. E. Moore, Louisville, Ky.; P. G. O'Riley & Co., Evansville, Ind.; N. W. Graham & Co., Cairo, Ill.; R. F. Sass, Shaler & Glass, St. Louis, Mo.; John H. Harris, Nashville, Tenn.; Harris & Hunt, Memphis, Tenn.; Clarke & Co., Chicago, Ill.; W. H. H. Koontz, Alton, Ill.; or to Freight Agents of Railroads at different points in the West.

The Greatest Facilities offered for the Protection
and Speedy Transportation of LIVE STOCK,

And Good Accommodations, with usual privileges for persons traveling in charge thereof.

FREIGHTS.

By this Route Freight of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Railroad also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company, can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA. PENNSYLVANIA RAILROAD."

E. J. SNEEDER, Philadelphia.
MAGRAW & KOONS, 80 North Street, Baltimore.
LEECH & CO., No. 2 Astor House, or No. 1 S. Wm. Street, N. Y.

LEECH & CO., No. 77 State Street, Boston.
H. H. HOUSTON, Gen'l Freight Ag't, Philadelphia.
L. L. HOUPP, Gen'l Ticket Ag't, Philadelphia.

THOS. A. SCOTT, Gen'l Sup't, Altoona, Pa.
Feb. 2-lyr.

Direct Route to the North-West!

-VIA-

ILLINOIS CENTRAL
RAILROAD

AND PANAMA OR SANDOVAL

FOR

Decatur, Springfield,
Bloomington, Peoria,
Burlington, Quincy,
La Salle, Rock Island,
Dixon, Galena,
Prairie du Chien, St. Paul, and
St. Anthony,
And all points in Iowa and Minnesota.

Passengers leaving Cincinnati either by INDIANAPOLIS AND CINCINNATI OR CINCINNATI, HAMILTON AND DAYTON RAILROADS make direct connections, twice daily, at PANAMA for all the above points. Connections also made with OHIO AND MISSISSIPPI R. R. with I. C. E. R. at SANDOVAL.

Passengers for the North-West

Desirous of making Quick Time, combined with comfort, should be particular and inquire for Tickets via PANAMA OR SANDOVAL and ILLINOIS CENTRAL R. R., and avoid change of Cars and Baggage, and the expense attendant thereon.

Daily connections are made at Dunleith with a Line

FIRST CLASS STEAMERS

Running in Direct connection with this Road for all TOWNS ON THE UPPER MISSISSIPPI

Close connections are also made at Dubuque with DUBUQUE AND PACIFIC RAILROAD, for Dyersville, Independence, Fort Dodge and Sioux City.

The Equipments of the ILLINOIS CENTRAL R. R. are unsurpassed by any Road in the West.

New, Elegant Patent Berth Sleeping Cars are run on all Night Trains.

Fare the same as by any other Route, and Tickets good until used.

Through Tickets can be procured at Spencer House, corner office; No. 1 Burnet House; 133 Vine Street, between Burnet House and Post Office; at the Depots, and all Principal Railroad Offices in the East and West.

E. H. NICHOLS,
Gen'l Southern Agent, Cincinnati.
W. P. JOHNSON,
Gen'l Passenger Agent, Chicago.

Winter Arrangement, 1859-'60.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood and Parkersburg on the West, at which places it unites with Railroads. Steamers, etc., for and from all points in the

West, South-West and North-West.

TWO TRAINS

Leave Wheeling daily at 12:35 P. M., and 10:10 P. M.

One Train leaves Parkersburg daily at 9:20 P. M.

Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City. Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone by other lines.

Through Tickets to the Eastern cities can be procured via Washington City at an additional charge of \$2.

Time as quick and Fare as low as by any other ROUTE.

Inquire for tickets via BALTIMORE AND OHIO RAILROAD, at any of the principal Railroad Offices in the West.

E. F. FULLER,
General Western Agent
L. M. COLE,
General Ticket Agent.
W. P. SMITH, Master Transportation.

PATENTED GAS WORKS OF THE AUBIN GAS WORKS CO.

Gas Works, to be generally adopted by the owners of Factories, Private Residences, Hotels, and other such establishments requiring much light, should possess the following advantages, to wit: great simplicity of construction and operation; reliability to insure a regular supply of light; purification of the gas to prevent clogging; freedom from unhealthy and offensive odors; safety from fire and explosion; adaptation to different materials, and to work days only, or continuously, as required; lastly and chiefly, economy both as to repairs and cost of the gas.

Gas Works coming up to the above standard are what the public want. Are there any such? To determine this question, there is but one safe course for parties desiring Gas Works, to wit: to examine for themselves, without falling into any of the opposite errors of credulity or prejudice.

To this test the Aubin Company will, at all times, submit their works; and as an inducement to parties to take the trouble of making it, they refer to the *Scientific American*, of March 13, 1858, and circular which can be had on application.

Unequalled Economy.

1st. From the great simplicity of construction peculiar to the AUBIN WORKS, the repair is the only part exposed to destruction, except of course, after a use of years. As we have, at last, discovered how to make our retorts stand a white heat without melting, they last a great while; and, as when required, the workman can change them in a few minutes—the cost of repairs is very trifling.

The Cost of the Gas

Depends on the quantity made at one operation, and the material used; but even where 300 feet only is made, the cost for all materials used will not exceed 40 cents—the ordinary yield of gas being at least 12 feet per 1 lb. of rosin, and from other materials in proportion.

PRICE OF THE AUBIN PORTABLE GAS WORKS.

A complete apparatus with large stove and dry or wet gas holder, holding 300 cubic feet,.....	\$300 00
do do do 350 ".....	335 00
do do do 400 ".....	375 00
do do do 500 ".....	450 00
do do do 600 ".....	525 00
do do do 700 ".....	600 00

The above prices are for the apparatus complete for use at Cincinnati. Where a wet gas holder is used, the tank and tar reservoir are extra, but the connections are furnished.

To enable persons requiring gas works to judge of the size most advantageous for their purpose, the following table has been prepared on the basis that an ordinary fish-tail burner (known in stores as 4 and 5 foot burners) will consume 2 feet of our gas per hour. It may be well to add that the larger the gasometer, the less frequently must gas be made, and, therefore, the less costly in the end.

Table showing the Contents and best Proportions of Gasometers from 400 to 4000 ft., and the Number of Lights they will supply for a given time.

Contents in Cubic Feet.	No. of hours for 10 lights.	Diameter of Gasometer.	Height of Gasometer.
400	20	10 ft.	5 ft. 3 in.
500	25	10 ft.	6 ft. 6 in.
750	37	12 ft. 6 in.	6 ft. 2 in.
1000	50	13 ft.	7 ft. 8 in.
1500	75	15 ft.	8 ft. 6 in.
2000	100	17 ft. 3 in.	8 ft. 7 in.
2500	125	18 ft.	10 ft.
3000	150	20 ft.	10 ft.
3500	175	20 ft. 6 in.	10 ft. 1 in.
4000	200	21 ft.	11 ft. 9 in.

If a gasometer of a different capacity from any of the above is required, its contents, size, &c., can be readily calculated on the same basis, also any other number of lights or hours of consumption.

We will observe here that, while coal gas deteriorates rapidly, when kept long, our gas is even better after having been in the gasometer for a few days. Even in winter, it can be kept any length of time without deteriorating or being materially diminished in volume.

N. B.—For circulars and lithographic plans of the large private works (for factories, &c., &c.) of the Company, or of their village works, as now in operation in several States, apply to

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43 MAIN STREET, CIN.

W. HARVEY'S SAFETY JOINT

For Coupling the Ends of "T" Rail
PATENTED, NOV. 2, 1858.

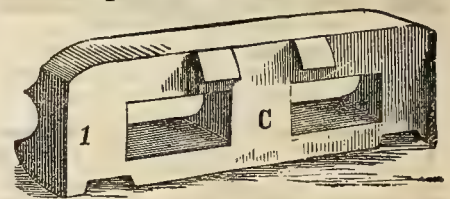


Fig. 1 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

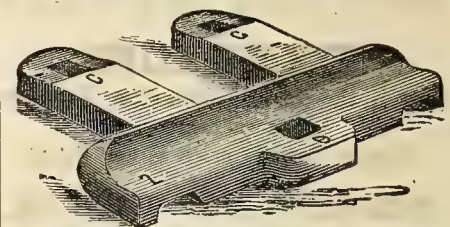
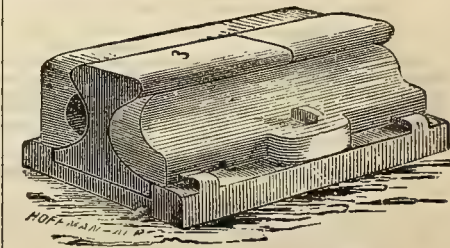


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that on a part assists and takes the strain of the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly safe road, thereby doing away with the breaking of rails, wheels and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear of the rolling stock of the road.

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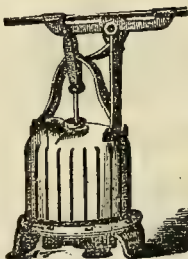
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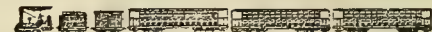
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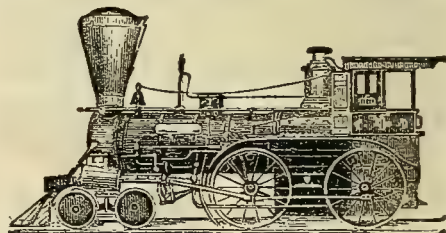
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New York Exp.	11:15 A. M.	9:00 P. M.	9:00 P. M.
Night Exp.	5:06 P. M.	4:00 A. M.	4:00 A. M.
Utica Accom'n.	6:40 P. M.	Ar. U. 10:00 P. M.	
N. Y. Mail	11:15 P. M.	10:00 A. M.	10:00 A. M.
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New York Exp.	5:15 A. M.	5:15 A. M.	3:30 P. M.
Steamboat Exp.	8:00 A. M.	8:00 A. M.	8:00 P. M.
Mail			2:30 P. M.
Cleveland Exp.	6:40 P. M.	6:00 P. M.	4:40 A. M.
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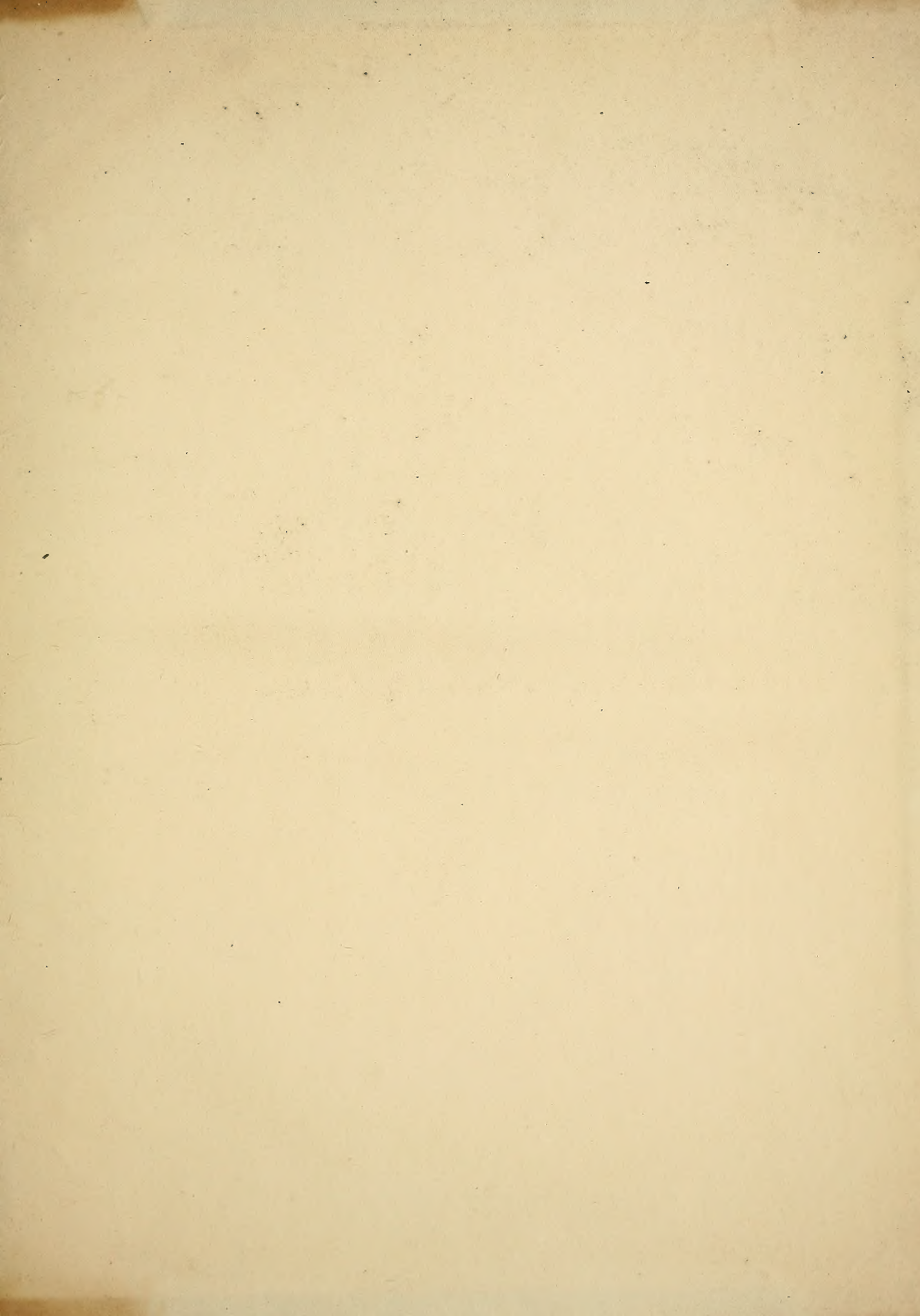
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